

“Modelling Cross-Sales to promote Customer  
Retention in the Financial Services Industry:  
the 'Who-What-When Framework'. Two case  
studies”

María Teresa Salazar

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## **Abstract**

Customer retention has been shown by academic researchers to be more profitable than customer acquisition. However, its implementation in the business environment has not been so successful. One of the reasons for this is that customer retention can be achieved in several ways (i.e. loyalty programs, affinity cards and switching costs) and that the translation from the concept of “retaining customers” to the actions and strategies to retain them is not always easy.

One of the most attractive strategies to ensure that customers remain within the organisation is through cross-selling and up-selling. In short, the objective is to increase the number (or the value) of the products that a customer buys from a company to make it more difficult for him/her to leave. Whilst academic research has deeply investigated the concepts of loyalty, retention programs and trust, amongst others, cross-selling has not received the same level of attention. Moreover, existing research on cross-selling has been focused on products rather than on services. Finally, this research has mostly been conceptual in nature, with limited attempts to model or design practical cross-selling and up-selling strategies. In order for cross-selling and up-selling to be effective retention strategies, they need to be tailored to the needs of the customer. The offer must be adequate in terms of the target (who is going to buy the product), the content (what is going to be purchased) and a time (when is the right moment to offer the new product).

This thesis investigates customer retention and cross-selling and up-selling from a practical point of view in the financial services industry. Firstly, it assesses the importance of the concepts of customer retention and cross-selling and up-selling through several interviews conducted with financial services providers (insurance companies, building societies and independent financial industry bodies). Having established the relevance of these concepts in the industry, the next step developed and applied a framework to design cross-selling and up-selling strategies. This framework, named the “Who-What-When” framework, was applied to the transactional and customer data bases of two financial services providers (a Spanish insurance company and a UK building society). The “Who-What-When” method

begins by segmenting the customer base in order to understand the characteristics and potential of each customer. It then, moves to modelling purchase propensity models, understanding the relationships between products in order to determine what product should be offered to each segment, according to their characteristics and their consumption history. Finally, it analyses the time sequence of the purchases in order to determine the right time (when the purchase is more likely to occur) to approach each customer, bearing in mind how they behave and the maturity of the products already held.

The contribution of this thesis is twofold. From an academic point of view, the research demonstrates the importance of customer retention and cross-selling in the financial services industry, being both recognised as key strategic and tactical approaches for the future of the industry. Secondly, from a practical point of view, it contributes by developing an analytical framework to discover and design cross-selling and up-selling strategies, aimed at retaining customers. This is achieved through the ‘Who-What-When’ framework which takes into account customer characteristics, consumption patterns and acquisition sequence to model cross-selling activities. Therefore, it refutes the traditional approach that ‘one size fits all’, advocating tailored strategies. Finally, this research highlights, from the empirical analysis, how repurchase decision is highly influenced by the length of the relationship with the provider and the type of products already purchased. Understanding these factors is key to successfully retaining customers via cross-selling.

To Micky and Dolly, just for being here, there  
and in my heart every single day along the way.

*Para Micky y Dolly, simplemente por estar  
aquí, ahí y en mi corazón todos los días en este  
camino.*

## **Declaration**

I declare that this thesis has been composed by myself. To the best of my knowledge and belief it contains no material previously published or written by another person. It does not contain material that has been accepted for the award of any other degree or diploma in any university, except where due acknowledgement has been made.

7<sup>th</sup> June 2010

María Teresa Salazar

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**Chapter one**  
**INTRODUCTION**

During the last couple of decades, retaining customers has become a strategic objective for financial services providers. The reasons are several. Firstly, over the last twenty years, the financial services industry has undergone drastic changes (Morgan, 1994; Lymberopoulos *et al.*, 2004, McShane *et al.*, 2010). Factors like deregulation, market internationalisation and the emergence of new forms of technology have all brought new opportunities as well as threats for the existing players, resulting in a highly competitive industry (Bergendahl, 1995; Hislop *et al.*, 2002; Beckett *et al.*, 2000; Haynes, T., 2010).

In addition, fast moving information and communication technologies have helped drive the popularity of customer retention by enabling the capture, storage and manipulation of data used to drive customer retention strategies. (Crosby and Johnson., 2001; Crosby and Johnson, 2001a; Vtanasombut, 2008; Jullian, 2009). In a technical sense, data warehousing can now integrate information about customers and other stakeholders. Data has become more accessible and can be used in more advanced combinations. This data availability has permitted the growth of data mining, understood as the systematic process which uses advanced models and techniques (statistical, automated computing) to extract and refine information (Gummesson, 2006; Minami and Dawson, 2008; Saundra *et al.*, 2010).

The academic environment has also contributed to this emphasis on customer retention by referring to a number of studies which have evidenced numerous advantages derived from maintaining customers within the organisation on the basis of long-term relationships. Bejou *et al.*, (1998) and Zhang *et al.*, (2010) suggest its benefits in terms of loyalty. Reichheld (1996), Mittal and Lassar (1998), Liang *et al.*, 2008 and Reinartz *et al.*, 2008) speak about cross-selling and the gain of obtaining a bigger share of the customer's wallet. Reichheld and Sasser (1990), Fornell and Wernerfelt (1998) and Campbell and Frei (2010) emphasise the impact of customer retention on increasing profits. With reference to profitability, Evans and Laskin, (1994) and Augusto de Matos *et al.*, (2009) talk about how existing customers reduce the cost of advertising and other promotional activities which were aimed at attracting new customers. Furthermore, it seems that customer retention is a key

factor in transforming customers into companies' advocators, by positive word of mouth.

As a result, as markets mature and competition intensifies, financial companies have to explore ways to increase customer retention. This emphasis on customer retention has its roots in the theoretical framework of Relationship Marketing which focuses on developing long-term bonds with individual customers (Roberts *et al.*, 2003; Cannière *et al.*, 2010). A key feature of this approach is that not only does it result in increased customer retention but it also provides a sustainable competitive advantage to firms as the intangible aspects of a relationship are not easily duplicated by competitors. The scope of Relationship Marketing has been addressed by a number of authors including Christopher *et al.*, (1991), Doyle (1995), Kotler (2003), Morgan and Hunt (1994), Webster (1992), Payne and Frow (2005) and Michalski and Helmig (2008) leading to different definitions (See Appendix 1). In short, it can be said that the scope of Relationship Marketing includes the development and management of relationships in six markets, namely: internal, customer, referral, supplier, influencer and employees (Veloutsou, 2002). Although Relationships Marketing is concerned with developing strategies not only with customers but also with suppliers, employees, stakeholders and competitors, for the purpose of this research, the focus is on customers

There are indications that Customer Relationship Management (CRM) and customer retention are more advanced in retail financial services than they are in most industries (IDC, 2000; Morgan, 2009). One of the ways in which companies in general, and financial services providers in particular, have built long-term relationships and promoted customer retention has been through the use of cross-selling strategies. Many financial organisations have customer bases in which many customers hold only a single product. On the other hand, customers who have more than one product can be very profitable (Foss and Stone, 2002; Augusto de Matos *et al.*, 2009). The supported correlation between customers holding more than one product and customer profitability has led many companies to realise the potential of cross-selling and up-selling actions (Salazar *et al.*, 2007). The justification for this

comes from five possible reasons, namely: 1) a lower cost source of leads than other means of identifying or reaching prospects; 2) possibly higher response rates; 3) increasing effectiveness by carefully targeting customers; 4) increasing the bonds between customer and provider; and 5) increasing the switching costs (Foss and Stone, 2002; Kamakura *et al.*, 2003; Campbell and Frei, 2010).

In spite of increasing importance attached to retaining customers (Bhattacharya, 1997; Guicheng *et al.*, 2009), empirical investigation into organising and managing retention is relatively recent (Ahmad and Buttle, 2001; Clarke, 2001; Calciu, 2008). In addition to this and despite its obvious importance, cross-selling has received little attention in academic circles. Most studies have been conducted for durables (McFall, 1969; Clarke and Soutar, 1982; Pyatt, 1964; Kumar *et al.*, 2008) with a descriptive focus. In terms of the financial industry, the research has been even more limited with the exception of Stratford *et al.*, (1982) and Kamakura *et al.*, (1981, 2003, 2008). There have been a few descriptive studies over the past four decades that explored consumers' sequential purchases (Blattberg *et al.*, 2009; Bitner and Zeithaml, 2000; Boulding *et al.*, 1993; Hauser and Urban, 1986; Mayo and Qualls, 1987). The article by Kamakura, Ramaswami and Srivastava (1991) is the first to model cross-selling opportunities formally. Over the last few years, there have been several more studies (Knott, Hayes and Neslin, 2002; Edwards and Allenby, 2003 and Kamakura, Kossar and Wedel, 2004; Reinartz *et al.*, 2008).

### **1.1 Research Context**

The context of the research study is the financial services industry, particularly the Spanish and UK industries. It is useful at this point to provide a brief contextualisation of the European financial services industry in order to put the later case study companies into a broader context. Understanding the external conditions when this research was conducted is crucial to identify the challenges and opportunities that the case companies face and enjoy, and how the broader environment may determine how customer retention and cross-selling might fit within the organisation.

### 1.1.1 Financial Services Overview

During the last three decades, the financial services industry has been one of the most rapidly growing industries around the world, specifically in the western countries. However, it is not only growth (Beck *et al.*, 2000; Hasan *et al.*, 2009), but unprecedented changes that have altered the existing conditions and opened the door to new opportunities and threats. Some of these major changes have been the result of the de-regulation process which countries have undertaken in order to be perceived as international players. As a result, competition has increased, weaker competitors have been removed from the industry and strong companies have become stronger, with an international business scope. Together with this legal transition, there have been several sociological issues shaping the new reality of the financial services industry. The natural evolution of society and the literacy of consumers have influenced, and are still influencing, the future of the industry. Additionally, technology is provoking a major change in how financial businesses operate and on the new opportunities that they can obtain by changing their operational models.

Prior to the impact of these factors, the financial industry could be described as a very fragmented industry (Calomiris and Kerceski, 1998; Boot, 1999; Chang *et al.*, 2009). Due to the regulations that existed at that point in the European countries, financial services providers used to ensure their status quo and a protected area in which to operate. This meant that there were limitations to the kinds of products that each type of institution could offer and the areas where they could operate. Under these circumstances, competition was limited and certain players operated under quasi-monopolistic conditions where they were the only ones allowed to provide certain products. As a result, marketing strategy was basically aimed at protecting existing businesses (expanding branch network) (Verbeek, 1997; Hartmann, 2010), however, this situation was about to suffer a drastic change during the last two decades of the 20<sup>th</sup> Century.

### 1.1.2 Regulatory factors:

With the Code of Liberalisation of Capital Movements of 1957, the member countries of the OEEC set up new conditions of the European financial market without restrictions to the movement of capital (Gelos and Roldós, 2002; Postner and Veron, 2010). Some of these transformations derived from this decision, focused on the rigidity of the industry with a vast amount of regulation and legal barriers to compete. As a result of this, during the 1980's and early 1990's, all the member of the European area started their so called Deregulatory Processes (Cummins and Rubio-Misas, 2004, Barth et al., 2000; Kovacevick, 2008). The basic consequences of these liberating measures demolished the limitations to the business scope and to the areas of actuation. Therefore, financial services providers were no longer forced to offer just one type of product (i.e.: building societies and mortgages, banks and current accounts and insurance companies and insurance policies), but they could increase their portfolios (Mackay and Molyneux, 1996; Thorburn, 2008). Moreover, where companies' regional limitations were erased, from that moment on they could compete anywhere within the country boundaries and, after the agreements with other European countries, the territory expanded to the whole of the European Union (Berger et al., 1999; Postner and Veron, 2010). The following table evidences some of the main deregulatory processes affecting the two countries of the study

Table 1.1 Deregulatory processes in the UK and Spain

UK:
<ul style="list-style-type: none"><li>• Beginning of the 1970's: Remove Clearing Bank Interest Rate Cartel</li><li>• 1979: Supplementary Special Deposit Scheme</li><li>• 1986: Building Societies Act</li><li>• 1986: Financial Services Act</li><li>• 1997: Building Societies Act</li><li>• 1998: Bank of England Act</li><li>• 2000: Financial Services and Markets Act</li></ul>
Spain:
1977: Real Decreto 2290/1977 <ul style="list-style-type: none"><li>• 1979: Orden Ministerial 20 Diciembre</li><li>• 1984: Ley 13/1984</li><li>• 1995: Real Decreto 1370/1985</li><li>• 1989: Ley 26/1989</li><li>• 1990: Real Decreto</li><li>• 1992: Tratado de Maastrich</li><li>• 1993: European Union's Second Banking Directive</li></ul>

Source: [www.fsa.gov.uk](http://www.fsa.gov.uk) ; Tayler, 2005; Hammond and Thwaites, 2000; [www.bde.es](http://www.bde.es) ; Cummins and Rubio-Misas, 2006; Kumbhakar *et al.*, 2001)

As a consequence, de-regulation was followed by a relocation of resources into new markets and regions (Stiglith, 1985, Boot et al, 1993: Rahesh and Bajeev, 2008). As a result, the financial industry witnessed several company mergers and closures during the 1980's and 1990's; this sharply increased the trend towards joint ventures, links with other service providers and acquisitions (Ennew et al., 1990: Thorburn 2008). This increased competition started to make companies aware of the value of their customers. Hence, business strategies were redesigned to fit into the new environment: from a functional-based organisational structure to a flexible one which focused on products initially and ultimately on customers (Johne and Harborne, 1985; Sensarma, 2008).

### 1.1.3 Socio-economic changes:

Over the last two decades, customers in the financial sector have also changed, making the industry much more challenging (Mapfre, 2006; Grayson *et al.*, 2008). Rising financial literacy levels have generated a much more sophisticated client with a deeper understanding on what he/she wants (Harrison, 2000). Moreover, the multitude of offers and sources of information have proved to be very efficient for customers to improve their understanding of financial services terminology (Peelen, 2005; Stone 2009). In this situation information has become a crucial tool to link customers and financial services. This increased level of sophistication allows financial companies to launch into the market more tailored products which offer new business opportunities. Customers, on their side, now expect better service as they have become aware of their own value to the organisations.

Since liberalisation of the industry, companies started a fierce war to increase their business scope and market share. This clearly implied attracting customers from other institutions. This increased competition reinforced the need of customer acquisition as the main strategic objective (Wilson, 1992; Hartman 2010). This sometimes was attempted by intensive attraction campaigns which slowly reduced loyalty and relationships. Therefore, customers have become much more promiscuous in their financial purchase decisions (Stephenson and Kiely, 1991;



Grayson, 2008). Now the objective is to get the best offer from a variety of companies, which can be difficult to differentiate from one from another. It seems obvious that in these circumstances, financial companies have to listen carefully to customers in order to be able to design a value proposition with competitive conditions (Stone and Woodcock, 1997; Maas and Graf, 2008).

#### 1.1.4 Technological aspects:

Firstly, the Information Society has restructured production. In this way, the advances in technology have improved the productive capacity of companies, allowing them to be more efficient (Devlin, 1995; Kuan *et al.*, 2008). Additionally, companies can now count on valueless assets: speedy information about their systems and processes improves control and operational models. Mackay *et al.*, (2001) called the current society “Post-Fordism”. They characterised it by flexibility, customisation, niche markets and ‘Just In Time’ (JIT) delivery.

Moreover, the contribution of technology has allowed companies to be more market orientated. They can take full advantage of technological innovations with their ability to collect and analyse data on customer patterns, interpret customer behaviour, develop predictive models, respond with timely and effective customised communications and deliver product and service value to individual customers. These technological tools consist of software and data warehouse systems that intelligently search for patterns and relationships using embedded algorithms (Baker and Baker, 1998; Tercha, 2009).

By using technology to “optimise interactions” with customers, companies can create a holistic view of customers and learn from past interactions how to optimise future ones (Howcroft and Beckett, 1993; Campbell and Frei, 2010). Finally, the Internet has opened up a new medium for businesses, and a new channel to ease the process of finding suitable providers around the globe and deliver their products without boundaries. Moreover, it is a very powerful tool which can gather information in real time that can be used to reach a quicker understanding of customers’ purchase behaviour. This data can easily be transformed to be included in the transactional

activity, facilitating the estimation of demand, therefore easing the production process (Ahn et al., 2003).

All these advances in information with respect to customers and production, and all the potential benefits that financial service providers can obtain from combining them, are also shaping the industry's current situation with a clear focus on efficiencies and getting close to customers' needs.

## **1.2 The current financial services industry**

Little remains from the highly regulated situation which financial services providers operated, three decades ago. There has been, and still is, an ongoing transformation in the industry (Verbeek, 1997; Betts, 1994 Taylor, 2005; Hammond and Thwaites, 2000; Cummins and Rubio-Misas, 2006; Kumbhakar *et al.*, 2001; Kovacevich, 2008; Chan *et al.*, 2009). At the moment, the financial industry can be considered as a growing sector with large competition, between traditional players, international corporations and other non-traditional providers (i.e. Tesco and Sainsbury who, in the last five years started to develop and offer their own range of financial products, usually managed by well-known "high street" providers) (Baldock, 1997; Laforet, 2008). All these companies follow multi-product and multi-channel strategies aimed at offering a complete solution to *all* financial needs that customers might have. In this way the retail strategy, traditionally based on offering branch services, has now been updated and complemented with telephone call centres, mobile telephone communications, agents and internet services, to provide the complete response mentioned before (Easingwood and Storey, 1997; Butler and Durkin, 1998; Haines, 2010).<sup>1</sup>

In addition to this, customers have become more and more demanding moving away from generic formulas and require a unique response to their specific problems. As a consequence, segmentation is growing as a necessary strategy to understand

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<sup>1</sup> In the UK examples can be found like: "HSBC and the international bank"; "Nationwide and the mutual concept" and "Sheila's Wheels as the female car insurance". In Spain the examples are "BCSH the bank for the young people"; "Caja Rural offering financial services to rural customers" and "Línea Directa as the cheap insurance without hassle".

customers (Sorper, 2002; Koderisch *et al.*, 2007; Sunikka *et al.*, 2010). As customers become more sophisticated, the segmentation criteria are also changing to develop into more comprehensive classifications which take into account socio-demographics (i.e. age, marital status); life styles (i.e.: social class, ACORN) and consumption behaviour (i.e.: number of products, channel, type of purchase) (Cornish and Denny, 1989; Green, 1977; Andronikidis, 2008; Fünfgeld and Wang, 2009). All this creates the need to move towards customers, leaving behind the focus on products and internal processes. Customers are a crucial asset for financial services (DeSouza, 1992; Wood, 2007; Glady *et al.*, 2009 ). Increasing competition is emphasising the need to pay attention to customers. As a result, the objective is being able to attract new customers at the same time as financial providers can retain existing ones.

### **1.3 Research Focus and objectives**

Set against this backdrop, this research attempts several objectives. First, it asks to what extent customer retention and Relationship Marketing have been recognised by financial services providers as the key strategy to survive in a highly competitive industry. Although there is some evidence in the literature, financial services industries across Europe are still recognised as being product orientated (Galbraith, 2005). Due to this, the objective here is to enquire if the Spanish and British industries have started to embrace these concepts of customer retention, long-term relationships and CRM. In addition, the question also seeks to understand the extent to which practitioners' understanding of these concepts are valid with a clear scope and influence their long-term strategies, or whether they appear to be merely fashionable business words that were adopted following the hype of the market.

The second objective relates to the validity of cross-selling and up-selling in the financial services industry. It has already been mentioned that despite the fact that companies seem to be quite interested in the enlargement of their customers' portfolio or in making them more valuable, little empirical attention has been received from the academic environment. Actually, of all the different strategies that the literature has identified as ways to promote retention, and to stretch the bonds between companies and their customers, cross-selling and up-selling have been, to

some extent, ignored in comparison with the investigation of areas such as loyalty programs or customer satisfaction, amongst others. In addition to this, it seems that there is some confusion within the literature itself about the relationship between customer retention and cross-selling. Although this relationship will be explained in further detail later on, this serves to clarify the point. Some authors consider that customer retention will lead to an increase in the probability of customers acquiring more products from the same provider or an increasing in their value (Mittal and Lassar, 1998; Evans *et al.*, 2004; Little and Marandi, 2003; Gummesson, 2006; Shi *et al.*, 2009). It is typically academic research specifically into cross-selling and up-selling that acknowledges this relationship, however the direction is the other way round. This means that cross-selling and up-selling would act as the promoters of customer retention (Cannière *et al.*, 2010; Kamakura *et al.*, 2003; 1991; 2004; Li *et al.*, 2005; Sommerson, 1998).

The final objective focuses on how to design cross-selling strategies and whether a common universal strategy can be applied or whether strategies need to be tailored to customer characteristics, consumption patterns and purchase time aspects. In order to address this third objective, the thesis develops the “Who-What-When” framework, the validity of which is tested on two different financial services providers’ customer data. Validating this framework has two key outcomes. Firstly, it suggests that the “one size fits all” premise is not applicable for cross-selling and customer retention purposes. Secondly, it offers a practical approach to design and develop customer retention programs through cross-selling, an approach which could be used by practitioners. This practical implication is very relevant given the lack of evidence in the literature of how to translate the concepts of cross-selling and customer retention to real life examples.

In summary, the research questions are:

- 1.- Is customer retention a relevant strategy in the financial services industry?
- 2.- Is cross-selling an appropriate means of promoting customer retention in the financial services industry?

3.- Can companies adopt a common cross-selling strategy for all their customers or should they consider customer characteristics and consumption patterns and timings when developing their cross-selling strategy?

In order to address these three research questions, a hybrid approach is used within the overall research framework of scientific realism. Firstly, several in depth face to face interviews were conducted with financial services providers and national organisations in order to determine the validity of such concepts in the financial industries of Spain and the UK. These interviews, together with the evaluation of internal documentation, constituted the qualitative research, consistent with the inductive research approach.

The second line of investigation consisted of the application of an analytical framework – making use of statistical and data mining techniques – called the “Who-What-When” framework, designed to help financial services providers to identify one or several cross-selling and up-selling strategies according to their customer features and their consumption. This framework was originally defined and tested in a pilot research study conducted in 2003-2004. However, refinements and improvements to the framework are put to a test in this thesis. The rationale underpinning this framework is grounded in several areas of research including segmentation, the Customer Life Cycle, Acquisition Pattern Analysis and the influence of time on financial product acquisition. This second phase of the research constitutes the quantitative method, which will use deduction as the main research method, given the type of data and the tools used to analyse it (statistical and data mining modelling).

The conduct of the research, and the presentation of the evidence resulting from it, is presented using two case studies (Company A: a Spanish insurance products provider and Company B: a UK building society). The case study is the most appropriate method for the conduct of this research given the level of detail to be provided on the retention and cross-selling strategies and the deep level of understanding and investigation requested to be able to put together a consistent output, linking

companies' ethos, environments, strategies, products and customers and their consumption behaviours.

#### **1.4 Thesis Structure**

The structure of this thesis is as follows.

The second Chapter presents a review of the literature where the main areas of theoretical relevance are discussed and critiqued. There are several theoretical and practical strands of literature underpinning this project (i.e. CRM, Customer Retention, Relationship Marketing, Cross-Selling and Up-Selling and Data Mining) that are interrelated. The aim of this first section of this chapter involves contextualising the research within its conceptual roots, in order to make it easier for the reader to understand the roots underpinning the rest of the project.

Chapter three is concerned with the research methodology used. Here, the different steps of the process of investigation are explained and justified. This illustrates a thoughtful and critical research design, where all the decisions made have been carefully considered, taking into account both their advantages and disadvantages. The nature of the three research questions and the selected methods to approach them recommend a hybrid approach which is detailed across the chapter.

Chapter four introduces the first case study (Company A) by providing a brief description of the organisation, its history and market position in Spain. In order to gather a better understanding of the conditions under which Company A operates, a concise picture of the main features of the financial service industry in Spain is also included. This section also reports the results of the qualitative analysis conducted for Company A. This qualitative approach is concerned with determining whether the concepts of Relationship Marketing and Customer Retention have any value for the Spanish insurance company in question. Having discussed this, the second part of the chapter provides the findings related to the second research question concerning whether cross-selling is perceived to be an appropriate strategy for customer retention.

Chapter five presents the quantitative analysis of the data from Case Study 1 (Company A). The key purpose of this Chapter is to apply the “Who-What-When” framework within the customer and transactional database provided by Company A. The objective is to determine if a common, universal cross-selling strategy can be adopted or whether customer characteristics, consumption patterns and time sequence influence the definition of cross-selling and retention strategies. The different stages of the analysis conducted (i.e. segmentation, acquisition pattern analysis and purchase sequence) are explained, in detail, accounting for the process of analysis, the results obtained, the methods used to validate the results and, finally, the key implications that can be derived from the analysis.

The sixth chapter introduces the second case study (Company B). Due to the differences, and to some extent, the specific historical evolution of the financial industries of Spain and the UK, this section commences with a short contextualisation of the situation of the financial sector in the UK. After understanding the conditions that UK building societies are facing at the moment, the second part of the chapter addresses whether customer retention (research question one) and cross-selling and up-selling (research question three) are perceived to be of any interest for the organisations operating in the industry.

Chapter seven presents the quantitative approach for Case Study 2 (Company B), taking the same approach and format as in Chapter Five in relation to Company A. The analysis attempts to determine significant differences between customers in order to identify the products that they are more likely to acquire in subsequent purchases (based on the differential features) and when the repurchase behaviour has higher probability to occur (research question three).

Chapter eight provides an overview of the results from Company A and Company B, explaining the results obtained by analysing the interviews conducted with the respondents and the findings generated by the “Who-What-When” model. This section is organised into two sub-sections, each one related to each of the two case studies. The first one explains the main cross-selling and up-selling strategies

identified for Company A, and how they should be managed in order to promote customer retention. In the same way, the second sub-section presents a specific plan of action to retain customers by making use of the cross-selling and up-selling strategies derived from the analysis conducted for Company B.

The final chapter highlights and discusses the main contributions and limitations of the project. Throughout this chapter, the main contributions of the findings are presented in relation to the overall characteristics of the industry, and in relation to the conceptual framework grounding the research. Then a summary follows highlighting the main contributions that can be obtained from the research from both academic and practitioner perspectives. The chapter also considers the extent to which the research questions introduced in the Methodology Chapter (Chapter three) have been answered. With this in mind, the last two sections offer a critical view of the main limitations identified, together with some recommendations for further research. Some of the limitations concern methodological limitations, others regarding the data collected or the analysis conducted. However, recognising these limitations opens the door for further research in order to suggest new lines of investigation that could be followed, based on the results obtained.



**Chapter Two**  
**LITERATURE REVIEW**

## **Introduction**

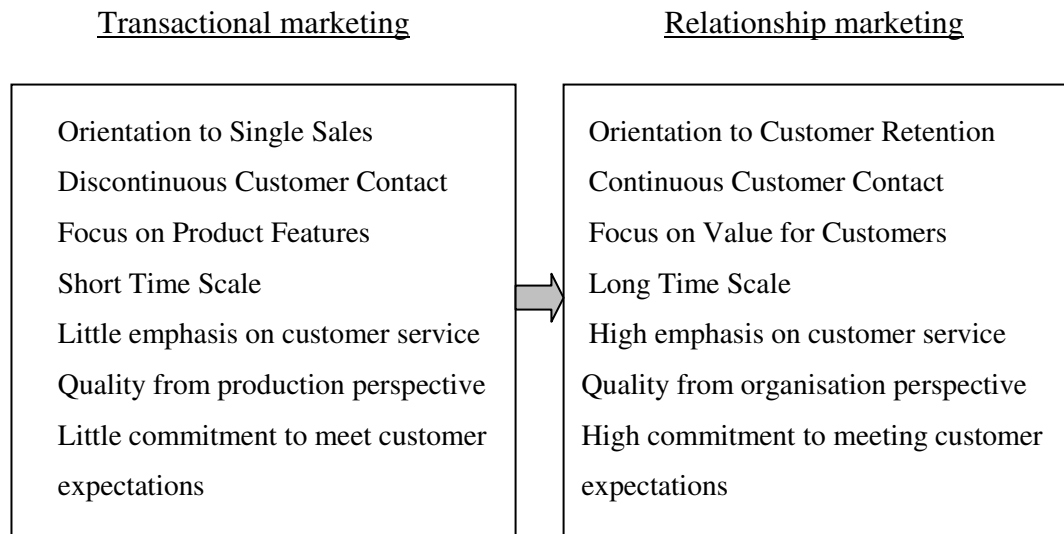
Following the brief overview provided in the Introduction Chapter, this chapter aims to outline the conceptual and theoretical issues and areas that ground this research project. For the purpose of this research, cross-selling and up-selling can be contextualised within the theoretical framework of Relationship Marketing (RM). With this in mind, the chapter first focuses on establishing a definition of Relationship Marketing, its objectives and most relevant concepts. Second it discusses one of the main objectives of Relationship Marketing: Customer Retention. Here, the main advantages of retaining customers will be investigated in order to respond to the question of why researching customer retention makes sense. Following this, the chapter will outline and discuss how the theoretical concepts have been applied in practice. The application manifests itself in the Customer Relationship Management (CRM) organisational philosophy. The progression of CRM has been influenced by technological advances which will also be explored in section three. The final section in the Chapter focuses on the available ways of promoting customer retention in the practical environment: cross-selling and up-selling. Due to the complexity of this contextualisation and the interconnections existing within and between the concepts, the Chapter ends with a summary of the conceptual framework of this research.

In short, this Chapter provides an overview of current understanding of cross-selling and up-selling and related fields, in order not only to establish the framework, but also to identify existing gaps in previous research which have motivated the direction of this research.

### **2.1.Relationship marketing: an old new way**

Relationship Marketing (RM) was popularised by Berry (1983, P. 25) as an approach aimed at “attracting, maintaining and [...] enhancing customer relationships”. This understanding of doing business from a marketing point of view implied a radical change from the previous perspective: Transactional Marketing. Figure 1.1 summarises this:

Figure 2.1: Comparison between Transactional and Relationship marketing



Source: Adapted from Payne *et al.*, (1995)

Although not explicitly outlined above, the transactional marketing approach emphasised the application of the marketing mix. McCarthy's (1960) simplification of the marketing mix, composed of four ingredients (e.g. Product, Price, Place and Promotion), has received severe criticism regarding its limitations. Technological advances and further research, favoured a change of scope in marketing and its implications for organisations (Shi *et al.*, 2010; Rust and Espinoza, 2006; Constantinides, 2006; Jayachandran *et al.*, 2005). For example, Kent (1986) criticises the "4P's" as it is not a model, but a tool to use in order to implement the marketing concept over time. Other sources of limitations argue that it constitutes a production orientated approach rather than focusing on customers' needs and wants (Gronroos, 1997; Gummesson, 1999; Baker, 2000, Gummesson, 2003; Cannière, 2010). In addition to this, the concept of marketing as a functional activity rather than as a culture involving the whole organisation provoked the existence of conflict with other areas for resources and relevance in the strategic decision (Baker, 2000; Michalski and Helmig, 2009). Moreover, Peppers and Rogers (1995; 2005) have attacked Transactional marketing for being narrow-minded with a clear emphasis on

short-term profits based on transaction volume, hence possibly forgoing the opportunity for long term prosperity.

In addition to the limitations outlined above, some studies, showed how concepts of profitability and customer retention were intimately linked (Reichheld and Sasser, 1990; Evans and Laskin, 1994, Barnes, 1994; Zhang *et al.*, 2010). In addition, a series of changes in the environment forced a change in the direction that the marketing concept took (Little and Marandi, 2003, Blattberg, 2009). Firstly, the globalisation process has afforded massive choice for customers around the world, intensifying competition in the market place. Secondly, developments in technology have made it possible for large organisations to build individual relationships with their customers (Peppers and Rogers, 1995, 2005). Moreover, customers have become more promiscuous due to the increasing competition and the product standardisation that made price a decisive factor on purchase behaviour (Bowen and Shoemaker, 1998; Dawes, 2009; Kaltcheva *et al.*, 2010). Finally, fragmentation of media has transformed traditional advertising, from being expensive and inefficient, leading to cheaper and more effective ways of approaching customers. The new realities experienced in the market place in both demand and supply, together with the limitations of the Transactional Model, opened the door for a new paradigm according to the new market conditions in the more mature and competitive industries.

#### 2.1.1 Nature and Scope of relationship marketing

Since the introduction of relationship marketing, numerous research projects have been conducted without reaching a unified definition of the concept. A few years ago, Dan and Dan (2001, P.347) stated that, at that time, there were more than 50 definitions published of relationship marketing. It can be assumed that this number has increased, however, there are some common elements that constantly repeat in this amalgam of confusion (Gordon, 1998):

- RM includes processes, technology, systems, communication and people to generate value for customers.

- RM redefines value under the perspective of a more customer-centred organisation where customers have a double role as a buyer and a partner.
- RM emphasises the value of the long-term, introducing concepts such as Life time Customer Value.
- RM focuses on building long-term relationships within the organisation and out of it. The idea of relationship marketing covers a wide spectrum of possible partners of those relationships. Firstly, there are internal relationships which imply the involvement and commitment of all the members of a firm, and with the stakeholders. Secondly, relationships outside the organisation refer to suppliers, distribution channels, intermediaries, customers and society as ultimate partners.

From the numerous definitions of relationship marketing (see Appendix I), this project considers that one of the most valid concepts of the term, was suggested by Grönroos (1990; 2009). He states that the purpose of relationship marketing is *“to establish, maintain, enhance and commercialise customer relationships so that the objectives of the parties are met. This is done by the mutual exchange and fulfilment of promises”*.

The question here is why has something, that is not strictly new, received so much attention since the 1980's? The practice of relationship marketing is most applicable to a service firm where each of the following conditions exists: (1) there is an ongoing or periodic desire for the service on the part of the service customer; (2) the service customer controls selection of the service supplier; and (3) there are alternative service suppliers, and customer switching from one to another is common (Payne *et al.*, 1996; Calciu, 2008; Augusto de Matos, 2009). All these elements appear in many industries characterised by mature markets, complex products and high competition. The combined effects of increasing competition which feature in mature markets, improvements in technology and subsequent creation of greater competitive opportunities, have led companies in general, and financial companies in particular, to become preoccupied with expanding their business scope and attracting new customers to the institution (Donnelly *et. al*, 1985; Maas and Graf, 2009;

McShane *et al.*, 2010). However, new to the business customers are becoming increasingly hard to find due to: (1) the increased number of competing companies (Ritter, 1993; Dawes *et al.*, 2009); (2) the difficulties of differentiating offers and products; (3) increased technological innovations (Ennew *et al.*, 1990; Morgan, 2009); (4) the growing complexity of customers' satisfaction demands (Harrison, 2000; Thorburn, 2008) and (5) the relative ease of switching from one [financial] institution to another (Salazar *et al.*, 2007; Augusto de Matos, 2009). In short, this combination of circumstances has redefined the limits and distinctiveness of providers, increasing competition and favouring customer's promiscuous behaviour when satisfying their financial needs (Mittal and Katrichis, 2000; Hartmann, 2010).

In such a scenario, companies should start asking how to reverse this undesired situation. One of the solutions found suggests returning to the idea of customers as the centre point of organisations (Grayson *et al.*, 2008; Thomas 2001; Athanassopoulos, 2000, Van der Poel and Larivière, 2004, Reichheld 1996). Gummesson (2006) and Stone (2009) determine that the rationale for investing in existing customers is that customers are increasingly being perceived as the scarce resource of a business, another is that getting new customers is sometimes more costly. Thus, relationship marketing and Customer Relationship Management (CRM) have become increasingly popular as subjects of academic enquiry and also practical application.

This situation has become even more acute in mature markets like the financial services industry which has experienced a continuous series of changes that have affected the business nature and the structure of the industry as has been outlined in the previous Chapter. As a result, the concepts of marketing, and the perception of customers and their value to the organisation, have needed to be reviewed favouring the transition detailed before.

As a summary of this section, Gummesson (2006), Kumar *et al.*, (2008) and Blattberg *et al.*, (2009) recognise that long-term relationships are one of the pillars of relationship marketing in opposition to transactional marketing, which is

characterised by single deals and customer promiscuity. Above all, relationships are fragile, but on the other hand they are crucial assets to a company and they should be created, fed, developed and measured (Turchan *et al.*, 2001; Terch, 2009). Customers who are satisfied with their relationship with a company may not necessarily buy more and may still switch if a competitor offers a better product or service. However, the better the relationship, the more likely the customer is to have doubts about switching to a competitor (Mintel, 2002; Augusto de Matos *et al.*, 2009).

## **2.2 Customer retention: “A bird in the hand is worth two in the bush”.**

Although the theoretical framework of relationship marketing consists of attracting and retaining customers, the latter has often been neglected (Christopher *et al.*, 1991; Epstein *et al.*, 2008; Ngai *et al.*, 2009;). The increasing interest in the area has acted as a catalyst for work on customer retention and, in particular, the impact of customer retention on profitability (Ryals and Payne, 2001; Shi *et al.*, 2009) Thanks to the pioneering research of Reichheld and Sasser (1990), who showed a high correlation between customer retention and profitability, a new area of investigation was discovered. In addition to this, Evans *et al.*, (2001) and Gupta and Lehmann (2005) identified two main problems associated with organisations mainly focusing on acquisition. First, many companies have failed to understand the costs associated with customer acquisition, and in many cases, they can be so high as to undermine any profit associated with particular costs (Hoffman and Novak, 2000; Reinartz and Kumar 2003). Secondly, there has been a realisation that customer defection impacts negatively on profitability and, despite that negative impact, finding new customers to compensate exiting ones is becoming harder and harder. The competitive climate has changed, successful new products are few and the “me-too” responses from competitors happen faster than before. Added to this, population growth has slowed down in many developed countries making new customers more difficult to find (Evans *et al.*, 2001; Gronroos, 2009). As a result, Fornell and Wernerfelt and Dawes (2009) found that marketing resources may be better spent on retention rather than acquisition. Nevertheless, Aspinall *et al.* (2001) and Kaltcheva *et al.*, (2010) concluded that despite the enormous attention given to customer retention in

academic and management literature, the actual practice of customer retention seems to be lacking.

An extended idea supporting relationship marketing and the management of client data is that firms benefit more from maintaining customers on a long-term basis rather than short term relationships. At its most basic level, customer retention can be defined quite simply as the process of keeping customers with the company. In essence, by activating a successful retention strategy a company can ensure that its customers will typically maintain their relationship over a longer period of time and the company will therefore be able to maximise an individual's profitable life-time value via cross-selling and up-selling activities (Intel, 2002; Pinzie and Poel, 2008). In addition to this, it has already been shown that the cost of attracting a new customer is five times higher than that of maintaining him (Rosenberg and Czepiel, 1984). Best (1998) and Maas and Graf (2008) argue that long-life customers produce higher revenues and margins per customer than lost or newer customers do and therefore total profits should increase over time. Furthermore, Reichheld and Teal (1996) and Grayson *et al.*, (2008) suggest that customers who have been around long enough to learn a company's procedures and have acquainted themselves with the full product line will almost invariably get greater value from a business relationship, and therefore it is not surprising that they are less price sensitive on individual items. In conclusion, as a customer's relationship with a company grows, profits rise (Reinartz and Kumar, 2000; Tercha, 2009). In this regard, Reichheld and Sasser (1990) and Calciu, (2008) found that consumer retention has a deeper benefit on profits than those obtained from other traditional measurements, such as market shares or economies of scale. Looking at other aspects of the benefits of retention, Colgate *et al.*, (1996) and Campbell and Frei, (2010) state that close relationships can act as a barrier to competitors' entrances, by keeping a stable and solid base for customers. The following list highlights the most significant advantages associated with establishing long-term relationships with customers:



- (1) Long-term customers buy more products from the company (Shi et al., 2009; Salazar *et al.*, 2007; Kamakura *et al.*, 2003; Paulin *et al.*, 1998).
- (2) Long-term customers cost less to serve than new customers (Bejou *et al.*, 1998; Kotler, 2000; Augusto de Matos, 2009) and reduce the pressure of finding new buyers who may not be profitable enough (Dawes and Swailes, 1999; Minami and Dawson, 2008).
- (3) Long-term customers are less price sensitive (Kotler, 2003) and are less influenced by competitors' marketing activities (Colgate *et al.*, 1996; Kaltcheva, 2009).
- (4) Long-term customers behave as company's advocates by transmitting their positive experience and supporting company's performance (Colgate *et al.*, 1996; Payne *et al.*, 1998, Evans *et al.*, 2001 ; Zhang *et al.*, 2010).
- (5) Long-term customers are more profitable for companies (Reichheld and Sasser, 1990; Van der Poel and Lariviere, 2004; Reinartz *et al.*; 2008).

From a company's point of view, the development and maintenance of close and effective long-term relationships between companies and customers could result in a deeper customer loyalty (Bejou *et al.*, 1998; Campbell and Frei, 2010). Furthermore, it has been realised that loyal customers respond better to cross-selling and up-selling strategies (Prinzie and Poel, 2008 Salazar *et al.*, 2004; Mittal and Lassar, 1998). The importance of retention has to do with the fact that the company does not have to spend huge amounts of money educating customers on its procedures, and customers know what to expect based on their previous experiences. Reichheld (1996) showed that retaining customers incurs significantly lower costs of dealing with them than acquiring them on a ratio of one to five. His explanation for this involved the unnecessary costs of advertising, contacting, and building trust with those that already know and work with the company.

As can be expected from a relationship, it is a two directional road where benefits have to be perceived by both sides. Therefore, there has been an increasing focus on understanding the benefits that customers might obtain from keeping long term relationships with their providers. Customers remain in relationships for two basic

reasons (Bendapudi and Berry, 1997; Kumar *et al.*, 2008): they either want to, or they have to. Wanting to stay might be the result of customer satisfaction and trust, whereas having to stay corresponds to the generation of barriers to change (Tuominen and Kettunen, 2002; Cannière *et al.*, 2010) or the existence of no obvious alternatives. Customers want to remain in a relationship when they receive ongoing benefits as a result of such a relationship

Customers receive psychological benefits from close relationships (Gorelick, 2010; Kammerer, 2009; Sheth and Parvatiyar, 1995; Berry, 1995; Gwinner *et al.*, 1998). In addition, there are also social benefits such as familiarity, personal recognition and friendship (Nambisan and Baron, 2009; Czepiel, 1990; Buttle, 1996), and economic benefits (Wendel and Dellaer, 2009; Peterson, 1995). Furthermore, customers can also obtain customisation benefits as service providers may tailor their services to meet customer specifications and requirements (Berry, 1995; Gelb *et al.*, 2008). Customers can also enjoy confidence benefits which relate to the sense of reduced anxiety, faith in the trustworthiness of the service provider, reduced perceptions of anxiety and risk, and knowing what to expect (Colwell *et al.*, 2009; Gwinner *et al.*, 1998; Evans *et al.*, 2001). Another source of advantage comes from special treatment which includes the ability of relational customers to skip queues, receive special prices or offers (De Wulf *et al.*, 2001; Milchalski and Helmig, 2008). It seems that customers are quite open to new and more enlightened forms of marketing because of their long experience with never ending promotions and long history of over-promising and under-delivering (Gupta and Lehmann, 2005; Sisodia and Wolfe, 2000). It may be the case that they value continuing relationships with known suppliers because of the opportunities provided for risk reduction, simplification of buying decisions and greater sharing of relevant information on products, as well as the provision of social benefits and/or special status (Paterson, 1995; Seth and Parvatiyar, 1995; Gwinner *et al.*, 1998; Gruen, 2000; Laforet, 2008).

Although the list of benefits associated with customer retention is relatively long, it cannot be forgotten that customer retention is an expensive alternative to mass marketing and, as such, marketers' commitment to such strategies are only valid

when they are deemed to be affordable and practical (Berry, 2000; Berry, 2009). In this sense retention has to be promoted as a time-based form of competitive advantage through the establishment of long-term relationships (Murphy, 1997). However, any discussion on the value of long-term retention must also recognise that not all customers contribute equally to a firm's profit (Egan 2004). The consequences of losing a profitable customer may therefore be very significant, whereas the loss of a non-profitable customer may actually be beneficial. Unless the company has a clear retention strategy supported by sound customer knowledge activities, the loss of key customers may go unnoticed (Strandvick and Storbacka, 1996; Shi *et al.*, 2009). However, determining the value of a customer is not always an easy task, mainly because customers' value changes over time. This idea has been used for the elaboration of the Customer Life Cycle Theory (Pinchuk, 2009). Kotler (2000) determines that customers not only have different needs and wants, but also that these needs can differ during different phases in each market considered. The realisation of those needs and their evolution is an essential activity on the development of customer relationships (Stauss, 2000; Meder, 2010). The need to account for customer profitability and the difficulty to do so, due to the fact that it is not a static value, have been the key to the apparition of the Life-time Value Concept. Ambler and Styles (2000) and Nimal (2008) suggest that a company should avoid taking a short-term view of the profit (or indeed loss) of any individual, but rather, should consider their income derived from life-time association with the company.

### **2.3 CRM: From theory to practice**

The translation of the conceptual theory of relationship marketing in the business arena provoked two decades ago, the introduction of a new acronym: CRM. It basically tries to implement the concepts of relationship marketing into business actions. Peelen (2005) and Glover *et al.* (2010) suggested how technological progress and the IT revolution have opened the doors for big corporations to introduce those concepts of relationship marketing in their *modus operandi* and strategies.

The concept of CRM is still open to debate. As a result, for some CRM it is simply a technology solution extending separate databases and sales force automation tools to bridge gaps between sales and marketing functions in order to improve targeting efforts. Others consider CRM as a tool specifically designed for one-to-one customer communications, a sole responsibility of sales/service, call centres, or marketing departments (Peppers and Rogers, 1999; Gurvick et al., 2006; Vatanasombut, 2008). Some companies understand CRM as a more complex and sophisticated application that mines customer data which has been pulled from all customer touch points, creating a single and comprehensive view of a customer while uncovering profiles of key customers, and predicting their purchasing patterns (Goldenberd, 2003; Morgan, 2009). In addition to this, Peppard (2000) and Stone (2009) propose that CRM is a system which accumulates, stores, maintains and distributes knowledge throughout the organisation. In this sense, it seems clear that the effective management of information has a crucial role to play in product tailoring, service innovation, consolidating views of customers, and calculating life-time value (Peppard, 2000; Blattberg *et al.*, 2009). Yet still, there are others claiming that CRM is a kind of application to help organisations assess customer loyalty and profitability, allowing them to achieve higher revenues and lower operational costs (Chen and Popovich, 2003; Musalem and Joshi, 2009). Furthermore, Saunders (1999) and Aksoy *et al.* (2008) define it as a strategy that helps create new customers, and more importantly, develops and maintains existing customers.

All these propositions about what constitutes CRM are to some extent valid. However, rather than providing a clear definition of what CRM is, they are partial views of the several elements that integrate such a complex acronym. In this research, the following definition of CRM has been proposed:

“CRM is a management philosophy that seeks to create, develop and enhance beneficial relationships with carefully targeted customers in order to maximise the value received by the customer, the profit/performance of the organisation and to meet the requirements of social forces.” (Salazar *et al.*, 2004; 2007)

In the literature, mainly journals with a clear practitioner focus, there is a significant identification between CRM and technology. This view is extremely narrow and can be one of the causes why organisations have seen their efforts to implement “CRM tools” failing. It is quite crucial to understand that CRM is not only about technical applications for marketing, but that it needs, when fully and successfully implemented, a cross-functional, customer-driven, technology-integrated business process management strategy which maximises relationships and encompasses the entire organisation (Goldenberg, 2000; Aksoy et al., 2008). Following Greenberg’s view (2003), CRM is a philosophy translated into a business strategy, supported by a system and technology (Musalem and Joshi, 2009).

Peelen (2005) presented the following four cornerstones of CRM:

- 1.- Customer Knowledge
- 2.- Relationship Strategy
- 3.- Systems and technology
- 4.- The individual value proposition

### 2.3.1 Customer Knowledge:

Knowledge of the individual is essential in order to develop long-term relationships and to supply customisation. The relevance of information about the customers of a company is the key to implementing relationship marketing strategies (Glazer, 1997; Morgan, 2009), to improve company profitability and customer service (Galbreath, 1998; Couldwell, 1999; Fluss, 2008). Weinstein (2002) and Calciu (2008) state how a good understanding of customers helps firms keep customers and gain a larger share of their business. Another benefit of understanding customers and their behaviour focuses on reducing churn by linking customer-level data and cancellation data in order to predict churn probabilities and prevent it before it is too late (Kon, 2004; Canniere *et al.*, 2010). In the same way, Ralph and Frith (2002) and Michalski and Helmig (2008) emphasise how knowledge about customers provides the ability to be proactive, rather than reactive, and supports a holistic approach across all business decisions, whilst providing the view of customers as individuals. Some

authors have recognised that the emphasis of CRM regarding customer knowledge should be placed on the integration of all the available data about customers to provide a single picture of each client (Pine et al., 1995; Berson, Smith and Thearling, 2000; Ryals and Knox, 2001; O'Malley and Mitussis, 2002; He *et al.*, 2004, Teo et al., 2006; Glover *et al.*, 2010).

### 2.3.2 Relationship Strategy:

Individual customer information must be used to develop a long-lasting customer-supplier relationship. The creation of such relationships is based on retaining customers within the organisation and involving them in a continuous dialogue between customers and companies. From all the possible ways that organisations are attempting to retain their customers. There are four that seem to be the most popular.

#### 2.3.2.1 Loyalty Programs:

Hart *et al.*, (1999) and more recently, Hartmann (2010) accept that there is little doubt that we are living in the age of the loyalty scheme. Evidence from consumer research tends to support the view that patterns of promiscuity and polygamy are the norm (Uncles, 1994; Barnard and Ehrenberg, 1997; Kandampully and Duddy, 1999; Thorburn, 2008). Due to this realisation, companies are trying to mitigate such effects by rewarding customers' loyalty. According to Bolton *et al.*, (2000) the aim of such programmes is to establish higher levels of customer retention in profitable segments by providing increased satisfaction and value to certain customers (Epstein *et al.*, 2008). Hart *et al.*, (1999) and Lacey and Morgan (2009) offer a wider range of motives for setting up loyalty programs such as: (1) building lasting relationships by rewarding customer loyalty; (2) gathering customer data and developing it into information; (3) reinforcing brand image by differentiating them from competitors, (4) defending market positions, and (5) pre-empting competitors' activities.

Many authors are pointing to the use of store loyalty cards as evidence of the up-take of relationships in the retail sector (Pressey and Mathews, 1998; Hoffman, 2008).

However, features such as loyalty cards may have a part to play in relationship maintenance, but they cannot realistically be taken as the panacea of marketing activities (Egan, 2004; Andronikidis, 2008). Actually, O'Malley (1998) and Malthouse and Mulhern (2008) define current loyalty programs as nothing more than sophisticated sales promotion where costs may frequently outweigh advantages. In the same way, Ward *et al.*, (1998) and Barry and Dion (2008) suggest that loyalty schemes act as reinforcing mechanisms, as it appears that they reward the "already loyal" rather than anyone else. Therefore, it seems that they have little effect on underlying affective commitment (Palmer, 1998; Pringle and Field, 2008) or on affecting the possibility of account retention (Bolton *et al.*, 2000; Slim, 2009).

#### 2.3.2.2 Increasing Exit Barriers/ Switching Costs

Another strategy related to customer retention refers to increasing the Exit Barriers. This means making as arduous and difficult as possible (within legal boundaries), the decision of switching their relationships. Switching costs are effective exit barriers for the company from the customer's perspective (Egan, 2004; Michalsi and Helmig, 2008). Customer retention can be established by building switching barriers (Bruhn, 2003). These will ensure that the customer is dependent on the firm and that the related turnover and profits are secured over the time period involved. The first type of barrier refers to Contractual Switching Barriers (Augusto de Matos, 2009; Jones *et al.*, 2007; Evanschitzky *et al.*, 2006), by which the customer is contractually bound to the manufacturer (e.g. leases, guarantees). The second type, Economic Switching Barriers imply that an early defection would be non-advantageous for the customer (e.g. customer cards linked to a discount) (Ling *et al.*, 2006; Chen and Wang, 2008). Another type of barrier coming from the suppliers' side concerns Technical/Functional Switching Barriers; those consist of building technical capabilities of products and serviced which leads to a lock-in effect. That is, the cost of switching from one brand of technology to another which is substantial (e.g. mobile phones, computers or car accessories that are not standard for all models or brands) (Liu, 2006; Wang, 2009). Finally, customers can also create their own exit barriers. These are the products of mutually recognised satisfaction (or possibly the

absence of dissatisfaction) created by the supplier to add value to the relationship (Egan, 2004; Chen and Wang, 2008). This type of barrier exists as a consequence of the relationship and may not be directly created by the supplier, although it might be in that supplier's best interest to illustrate the potential cost to the customer.

In addition to these barriers, Bhattacharya and Bolton, (2000) and Vázquez-Casielles *et al.* (2009) state that there are one-time costs that buyers encounter in switching from one supplier to another. Those costs may be created by the supplier, by the consumer or by the relationship itself. Some of these costs are: (1) search costs; (2) learning costs; (3) Inertial costs; (4) Risk; (5) Social costs; (6) Financial costs; (7) Legal barriers and (8) Emotional costs.

Ultimately, long service and all the interactions and costs explained above may act as powerful switching barriers, but they are not insurmountable (Stewart, 1998; Augusto de Matos *et al.*, 2009).

### 2.3.2.3 Customer Stimulation

Another retention strategy consists of persuading customers to reactivate their relationship with the organisation. Customer stimulation strategies are applied over the short term and should aim to re-activate the relationship with company or to redirect it when it is approaching a dangerous area (e.g. customers under the risk of abandoning or defecting) (Bruhn, 2003; Tsao, 2009).

The problem with this kind of reactivating strategy or others that focus on giving for example extraordinary discounts to customers is the extent to which they really do reinforce the relationship between the organisation and its customers? Actually, any short-term action involving aggressive economic benefits can generate the opposite effect. In this way, customers can become opportunistic actors and expect this kind of benefit all along; their relationship gets highly disappointing when they do not get their benefits on a regular basis (Port, 2010). Any retention strategy uniquely focused



on discounts, has a questionably successful future as it is not digging into the emotional boundaries which should be developed between companies and their customers. Moreover, such strategies transmit the message to the customer of looking for the best economic offer independently of the other elements of the value propositions.

#### 2.3.2.4 Customisation

Berry (1995) asserts that through customer retention, organisations gain a better knowledge of their customers' requirements and needs. This knowledge can then be combined with social rapport, built over a number of service encounters, to tailor and customise the service to the customer's specifications (Little and Mirandi, 2003; Finlay, 2008). Actually, one of the important requirements of relationship marketing and CRM is that of customisation of products and communication with each customer. Gilmore and Pine (1997) and Minami and Dawson (2008) have proposed four approaches to customisation. The first is called Collaborative Customisation and presents a dialogue between the company and the customer in the design of new products or the right offer for each customer (e.g. bridal dressmaker). The second customisation is Adaptive which consists of offering customers a standard product, but so designed that the customer can alter or customise it giving their final and personal touch (i.e. all the extras available on the acquisition of a car). Cosmetic Customisation consists of an external customisation of the packaging of a standard offering (i.e. engraving names on jewellery). The final strategy is Transparent Customisation which consists of offering unique goods or services to customers without informing them that the item has been customised (i.e. offering books based on products already acquired and on what other people acquiring the same books bought).

#### 2.3.2.5 Cross-selling and Up-selling

The last customer retention strategy discussed is the development of cross-selling and up-selling strategies. While the first one consists of a horizontal growth of products consumed by customers (increasing the number of different product

categories acquired by customers), the latter consists of a vertical consumption. This means increasing the value (not the number) of the products that customers are already acquiring from the same provider. Due to the relevance of cross-selling and up-selling for this research project, they discussed in greater detail in section 2.4.

The aforementioned retention strategies are just some of the methods which companies have used in the last two decades in order to maintain and protect their customers (Reinartz *et al.*, 2008). However, it has to be emphasised that they are not pure strategies. This means that usually any good retention strategy involves the combination of a few of them. For example, cross-selling and customisation used to go together, due to the fact that a correct cross-selling strategy needs to be customised for the customer who is going to receive it. Moreover, Loyalty programmes are also attempting to increase the repurchase figures by suggesting cross-buying opportunities to their customer (Moon *et al.*, 2008). As a result, the elaboration of customer retention strategies from a CRM point of view is a complex process which requires using different approaches in order to make the proposition to the customer attractive enough to engage him/her in a long term relationship with the organisation.

### 2.3.3 Systems and Technology

It is generally acknowledged that IT is a powerful support or enabler for the development of relationship building and customer retention, if used effectively (Berry, 2009; Egan, 2004; Jarrar and Neely, 2002). Developments in IT allow a organisations to store and manipulate information about customers and, ultimately, to provide customers with a better service. In addition to this, the advances of computer technology have allowed companies to automate most of their back-office tasks that are essentially, making them more effective as the process and production times reduce (Harrison, 2000; Vatasombut *et al.*, 2008). In any situation, the achievement of a successful CRM strategy largely depends on IT. The system must make it possible for customer knowledge to be developed in an efficient manner, for the relationship strategy to be implemented, for a dialogue to be conducted, and for customisation to be supplied. It is only situations where relationships must be

maintained with a small number of customers when the CRM can succeed without elaborate IT systems. As soon as relationships are maintained within a larger group of customers, then the use of IT becomes inevitable (Peelen, 2005; Glover *et al.*, 2010). Technological progress on IT has facilitated the collection of transactional data. As a result, companies can get more accurate access to transactional data and download it onto their databases on a daily basis. This abundance of data has provoked the need to create and improve databases. In addition to this, the relevance of databases has opened up doors to new concepts and applications such as Data Warehousing, Database Marketing and Data Mining amongst others have begun to receive significant attention from academia and practitioners, alike.

On the demand side, customers have manifested their desire to be treated more as individuals (Patterson, 1998; Barry and Dion, 2008). In order to satisfy this prerogative, companies require more effective media to target and understand customers. Technology has helped again, on the production chain by facilitating smaller production runs of niche products cost-effectively (Davidson, 2003; Valenzuela *et al.*, 2009). From a marketing point of view, technological developments have influenced the way in which market information can be collected, stored and utilised in order to provide greater information on individual customers, which eventually allows a more personalised targeting to take place (Finley, 2008; Evans *et al.*, 2004). All these possibilities have been facilitated even more by technology-driven, new interactive media such as the Internet and mobile telephony. Those two forms of media have allowed the capture of real time information about customer behaviour that is very valuable in shaping precise offers and understanding customers' needs (Ahn *et al.*, 2003; Franke, 2009). As a result, the new channels, systems and technologies available are helping companies to cut their costs significantly and to be more effective (Zineldin, 2000; Campbell and Frei, 2010). Additionally, all the information collected by a company enables a better understanding of their customers and therefore, allows a better customer service (Gordon, 1998; Abrams, 2000; Caffey *et al.*, 2000; Maas and Graf, 2008).

However, as Gummesson (1999) and Berry (2009) suggest, it is very easy to get carried away by the prospects of IT and assume that technology can effectively replace the personal aspect of the relationship. In addition to this, technology-supported developments aimed at increasing the efficiency of the organisation do not always necessarily increase value or convenience for the customer and are usually justified in cost reduction rather than in value-creating terms. (Edmund, 1999; Hartmann, 2010). Although it has been argued that the use of IT is now widespread in some industries such as the financial industry, it is not always used effectively for relationship marketing purposes (Perrien *et al.*, 1993; Fletcher and Wright, 1996; Ryals and Payne, 2001; Canniere *et al.*, 2008; Shi *et al.*, 2009)

#### 2.3.4 The Individual Value Proposition

An organisation that takes the initiative to get to know an individual customer, to develop a retention strategy with him or her, and to carry on a dialogue cannot avoid also offering its customers an individual proposition (Peelen, 2005; Franke *et al.*, 2009; Valenzuela *et al.*, 2009). For effective customisation strategies to become a reality there is a need to develop knowledge-based systems, to learn more about individual customers so that firms can really create the value that customers really want and be ready to serve those customers when they are ready to buy (Gordon, 1998; Port, 2010). Customisation is one of the prerequisites of the development of any relationship in the business arena. In order to initiate any degree of exclusivity in the relationship, the supplier must be able to offer the buyer something that its competitors cannot. Customisation may derive from the physical modification of tangible goods, or from the development of tailored services or transaction routines (Little and Marandi, 2003; Slim, 2009). In this situation, customer retention and building relationships with customer have been acknowledged as clear vehicles for product augmentation which lead to sustainable competitive advantage (Barnes, 1994; Minami and Dawson, 2008; Baltberg *et al.*, 2009). Since they are based on trust and commitment (Morgan and Hunt, 1994; Gwinner *et al.*, 1998), they are difficult to copy and therefore it becomes harder to lure away the customers of a company.

There is not a unique explanation for the arrival of this new philosophy of CRM within the business arena. Moreover, it should be better understood as the conjunction of several forces at the same time. All of them come from several sides, and because of that, they are driven by different goals. However, once they are bundled together, the result is an organisational paradigm which could match the aspirations of all the actors involved in the exchange process. From this overview, it seems obvious that CRM is a complex arena which interrelates with several areas. Due to this net of interconnections and the impact that CRM seems to have in the practitioners' environment, the next two sections will try to provide a critical view of CRM by offering not only its advantages, but also the shortcomings. The final part will try to introduce the concept of customer intelligence in order to introduce some technicalities with a deep influence in CRM and customer retention.

#### 2.3.5 Advantages of CRM

From a supply point of view, markets have consolidated and suppliers have developed policies to provide and deliver products and services in a very effective and similar basis. In addition to this, the quality standards imposed by the competition in the market have promoted homogeneity amongst offers (Krasnikov, 2009). Consequently, all of this has increased the extent of "me too" products. It means that, as long as companies are not offering any advantage over other competing products, consumers are unable to find significant differences amongst the market options. Thus, their willingness to pay more for a specific product or brand has been removed, favouring instead a high price sensitivity (Dawes, 2009; Kaltcheva, 2010).

In this scenario, companies have realised the ability continuously to generate intelligence about customers' expressed and latent needs, and how to satisfy these, are essential to continue to create superior customer value (Slater and Naver, 2000; Malhouse and Mulhern, 2008). Thus, the ability of a firm to create and maintain close relationships with their customers is a durable basis for a competitive advantage and a differentiation strategy (Day, 2000; Fluss, 2008).

Through the automation of tasks, process and procedures, CRM permits each department of the company to perform its functions better. When all the information about a customer is in the same place, it is easier to handle and to find sales opportunities for new offers (cross-selling and up-selling). Moreover, it facilitates the process of dealing with customers' deliveries, opportunities and complaints, as staff have a detailed picture of client characteristics and history. As a consequence, each customer is better served with an offer that fulfils their expectations and needs – current or latent.

Given that the idea of CRM is to focus the company's efforts and resources on the few existing or potential customers that provide the best business opportunities, buyer and seller can work together to modify and improve current products and services and to develop new ones. The final product will be tailored to the buyer's specific needs, and all the resources in the seller's organisation will be co-ordinated to serve that purpose (Sonnenberg, 1998; Valenzuela, 2009; Franke *et al.*, 2009). In this sense, there is co-operation between both parties to generate the perfect solution.

Through effective segmentation companies are able to target chosen market segments, micro-segments or individual customers more precisely (Payne, 2000; Epstein *et al.*, 2008; Rosmalen *et al.*, 2010). In fact, CRM's relevance to managing the information available allows the company to perform more complex segmentation through the combination of life-stage, hobbies, interests and social status to a better understanding of customers, and of the way they use the products (Clare, 2000; Consuegra *et al.*, 2006; Cameron *et al.*, 2007). Target marketing, or segmentation shifts a company's focus to adjusting products and marketing effort to fit customer requirements. When it takes place, customers perceive that they are important to the organisation and that their expectations and needs are perfectly satisfied. Overall consumer satisfaction plays a vital role in CRM, owing to its influence on repeat sales, positive word-of-mouth recommendations, and most importantly, customer brand loyalty (Davies 1996; Slim, 2009; Pringle and Field, 2009).

From the customer's perspective, CRM fulfils its expectations in terms of a high quality service, customised products, making customers feel valued and reducing anxiety (Little and Marandi, 2003; Hoffman *et al.*, 2008; Fluss, 2008; Lacey and Morgan, 2009). This means that the buyer will experience fewer surprises, smoother product transitions, and continuity in the people with whom he interacts (Sonnenberg, 1998; Laforet, 2008; Sunikka *et al.*, 2010). This sense of confidence is crucial to customers because any decision made is not risk free. Moreover, customers perceive that their interest, feelings and needs are important, and that they are understood by a company which listens to them and tries to assist them with future wants. In this sense, customers find the right product, at the right time, without the effort and time spent seeking it. Furthermore, when companies play a proactive role, they can delight their customers by finding out new opportunities or advantages in satisfying future needs. In conclusion, customers are rewarded for providing data, information and trust with a continuous satisfaction of their desires, saving money, time and anxiety. Hence, CRM offers customisation, simplicity, and convenience for completing transactions, regardless of the channel used for the interaction. Along those lines, as quality improves, consumers' expectations increase. Additionally, they have more information and are more educated, so they are in a powerful position so as to obtain the best deal (Mintel,2002; Thorburn, 2008; VRL, 2009). In this sense, as switching suppliers can be done without excessive cost, consumers have become more promiscuous.

Finally, a radical change in consumers' perceptions of multinational organisations and well-established brands has been experienced (Klein, 2001; Grayson *et al.*, 2008). From love and total attrition, the new paradigm has moved to a new picture. People are interested in social image, personal implication and have a genuine interest in companies from which they are purchasing products. Companies no longer need to possess only a strong image; they also must be socially accepted and well perceived by the public. In fact, customers are only disposed to support and collaborate with those organisations fulfilling social acceptance. Moreover, social responsibility deals with perception, beliefs, personal values; all of them sensitive

areas, generally hidden, and cannot be brought to the surface if customers are perceived as mere punctual transactions.

### 2.3.6 Disadvantages of CRM

Even if everything seems to match perfectly, the reality is that CRM is facing a huge amount of detractors and problems when attempting to be implemented. Giga (2001) estimates that 70% of companies implementing CRM will ultimately fail because they underestimate the complexities of CRM, lack clear business objectives and tend to invest inadequately in the provision of CRM software (Love *et al.*, 2009). As has been shown before, there is a lack of consensus on what exactly CRM is. Another problem has been the lack of clear knowledge and experience from those who sold and bought expensive tools. Mckim (2002) describes three main areas related to CRM's problems: (1) Failure to identify the company's business problems accurately enough before buying the software (King, 2010); (2) Lack of a common definition of CRM (Morgan, 2009); (3) Lack of measurement by either the software or the buyer of the technological effectiveness. In addition to these, Gentle (2002) has suggested other reasons which cause disappointing results of CRM, such as: (4) The organisation was not ready for CRM; (5) Poor data quality led to failure to customise dialogue and the value proposition; (6) The scope of the project was too broad; (7) Top management was not actively sponsoring the project (Maklan and Knox, 2009); (8) The project was IT driven and the focus on technology was too strong; and (9) Resistance from customers, IT department or other members of staff (Banks, 2009).

It should be pointed out that as a management discipline, CRM's arrival has been quite recent and unexpected. This situation has generated some confusion around it. The most important misunderstanding relates to the over emphasis on technology as the panacea rather than on considering it as a means to building relationships with customers. Many companies are unable to identify their customers. Few understand what they actually want or need, and fewer still have built any sort of customer-focused strategy to engage them (Rodgers and Howlett, 2000; Aksoy *et al.*, 2008; Fluss, 2008).



A second area of conflict rests on the difficulties of implementing this philosophy in organisations. Many companies are still structured around product lines or departments without any kind of interrelation amongst them. As mentioned before, CRM requires a constant flow of information inside organisations to gather all the available data on their customers. Information needs to be gleaned from across the organisation; hence linking together disparate IT systems becomes a priority (Musalem *et al.*, 2009). McKim (2000) has identified that just 38% of managers say their customer data (profile and account information) resides in one, centralised repository. Hence, the integration of different systems is one of the biggest challenges facing organisations today (Rodgers, 2000; Barry and Dion, 2008). If there are obstacles and barriers to that fluidity, CRM is a complete waste of time and money. However, it is not only a structural issue; cultural implications of CRM are also significant. As far as it is understood as a business philosophy, projects could be approached from a corporate strategy, embracing all its members (Bull, 2003; Pringle and Field, 2009). Every decision (strategic, tactical or operational) has to be made, bearing in mind, that the customer is supposed to be at the centre of the organisation, so he is the one who should receive the benefits. What seems to be so easy in theory, has a lot of problems in practice, mainly because it involves working with people and generates a total reorientation of the organisation (CSC Financial Services, 2001; Mahesh and Rajeev; 2008; Hartmann, 2010). In this way, Rigby *et al.*, (2002) suggested that, before implementing CRM software, it is important to firstly carry out the 'basics' of traditional customer acquisition and retention strategies (Li *et al.*, 2005; Ngai *et al.*, 2009; Glover *et al.*, 2010. This is based on a clear understanding of a company's customers, the objectives pursued by the retention strategy to be implemented and the best way to implement it.

In addition to this, creating, developing and improving relationships is very expensive and time consuming. If companies decide to embrace these concepts, they would clearly understand that they are possible and worthwhile. Clients are not always in the mood for establishing a relationship, there are several reasons for this

and companies have to understand this initial reticence in order to overcome them, or they just should cease their efforts.

Finally, organisations must realise that once the decision has been made, it should be counterproductive to step back. Relationships are costly and they demand continuous improvement, up-dates, resources and better quality (Little and Mirandi, 2003; Gupta and Lehmann, 2005; Zhang *et al.*, 2010). At least they are live processes without “use by dates” involving attitudes, trust, confidence and loyalty. Grönroos (1997) suggests that the trust created in a relationship has to be seen as a behavioural intention which reflects reliance on the other partner and involves uncertainty and vulnerability on the part of the trustor. If incongruent elements between ‘what they say’ and ‘what they do’ are found, the society and therefore their customer base will punish them.

As a consequence everything explained in the previous two sub-sections which has provided a critical overview of CRM, suggests the implementation of a successful CRM philosophy in the organisation depends on treating it, not as an add-on to the existing strategy and tactics of the company, but as an all-embracing strategy to conduct the company’s affairs, taking advantage of technology to achieve the desired objectives regarding customer retention.

### 2.3.7 Customer Intelligence

From the evidence presented before, it seems that the implementation of customer retention strategies through the philosophy of CRM requires knowledge and data intensive organisations. As a result of this emphasis on data and information, there has been a continuous growth of areas like data warehousing, data mining and direct marketing (Möller and Halinen, 2000; Terka, 2009). The creation of complete and powerful data bases has been recognised as the engine which enabled relationship marketing (Gordon, 1998; 2009). Similarly, Little and Marandi (2003) and Finlay (2008) determine that the objectives of CRM in keeping track of a customer’s activities during his or her interaction with the organisation cannot be properly achieved without the incorporation of databases. In the mid-1980s, the need began to

arise amongst managers to extract information from existing computer systems (Jonker, 1997; Krasnikov *et al.*, 2009). This appeared to be a desire that would not be met in the short term by the IT available at the time. Given the database structure, it was difficult to use the computer to answer ad hoc questions. Advances in technology (computational progress) and IT in general, started to give answers and new challenges appeared, namely (Peelen, 2005; Vatanasombut; 2008):

- The computer system must be able to keep up with the growing quantity of data and increasing number of users
- The data stored in the system must be a concise presentation of the concepts used within the company
- The design of the database must be updated to accommodate the usage
- The querying of the database<sup>2</sup> must be made relatively easy, enabling it to be done by a non-specialist computer user.

These are wishes that a data warehouse can fulfil. Jonker (1997) defined a data warehouse as an isolated environment: (1) designed for the support of management information systems/executive information systems/decision support systems, without placing an additional burden on the operational systems; (2) that contains data to make it possible to gain a clear, topic-orientated view into the organisation's history; and (3) in which users may obtain access to information in a quick and useful manner which allows them to support their decisions better (Glover *et al.*, 2010). For CRM, data warehousing offers a way to store customer data and enables customer intelligence. This allows a business to pull together seemingly unrelated data spread over disparate applications and servers, and analyse it from a broad, detailed and historical perspective (Lent, 1999; Campbell and Frei, 2010). Thus, data warehouses provide companies with the tools to look at customers from every angle, including the number of services and products that each customer uses, his or her actual or potential profitability, market segments, and much more (Gervino, 1998; Rosmalen *et al.*, 2010). In short, data warehouses comprise of large databases which gather information from the entire business (Devlin, 1997; Kelly, 1997; Menon and

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<sup>2</sup> A database is a collection of data records in a list that can be manipulated by software (Tapp, 2005). This concept needs to be differentiated from data marts, that are specialised systems that brings together the data needed for a department or related applications (Berry and Linoff, 2005)

O'connor 2007; Banks, 2009). Databases have become critical in meeting a company's objectives because without them, companies could not answer questions such as how many customers the company has; which products they buy; what the best cross-selling opportunities are amongst others (Marks and Frolick, 2001; Calciu, 2008).

Investment in databases has contributed to the apparition of new marketing concepts like Direct marketing. Tapp (2005) argues that Direct marketing focuses on using a database to communicate and distribute directly to customers so as to attract a direct response. He continues that the key to modern Direct marketing is the capture of individual customer details at the first sale, so that the marketer can begin a relationship with that customer, subsequently, treating him or her differently over time in order to generate repeat business (Wood, 2009). In early 1989, Bird defined Direct marketing as any activity which creates and exploits a direct relationship between companies and their customers on an individual basis. According to Christopher *et al.*, (1991), Direct marketing has developed a powerful tool in customer loyalty strategies (Grönroos; 2009),

In addition to Direct marketing, another term arose with the creation of databases: Database marketing. Tapp (2005) states that Database marketing consists of using a database to hold and analyse customer information, thereby it helps create strategies for marketing (Terka, 2009). It looks like there is a significant overlap with Direct marketing. Although some writers have split Direct and Database marketing, emphasising the use of the database as an information tool for strategies, there is a general agreement on the fact that the majority of Database marketing leads to Direct marketing programmes (Stone, 1996; Nash, 1995; Menon and O'connor, 2007).

In addition to the blurring boundaries between Direct marketing and Database marketing, there is also a grey area in connection to relationship marketing and CRM. Here, there are some authors who suggest that the three concepts converge to create a powerful new marketing paradigm where relationship marketing and CRM provide the conceptual framework and underpinning it Direct marketing provides the

tactics and Database marketing is the technical enabler (Chaffey *et al.*, 2000; Wood, 2009). On the other hand, there is also basis for arguments that differentiate between relationship, Direct and Database marketing. First (O'Malley, 1999; Sisodia and Wolfe, 2000; Trollinger, 2007; Wood, 2009) determined that Direct and Database marketing are primarily associated with data manipulation over and above personal relationships with a clear focus on short term tactics, rather than on long-term strategies with a personal involvement between customers and organisations. According to Möller and Halinen (2000), Database and Direct marketing are perhaps better characterised as practice, as they have no clear disciplinary background, no clear methodology, nor a premised theory of markets. On the other hand, relationship marketing presents long-term nature, with a clear focus on how to keep the customer loyal and profitable in an efficient way (Cliff, 2009). Similarly, Tapp (2005) determines that the essence of Direct marketing is predictive transaction marketing based on advanced segmentation approaches (Epstein *et al.*, 2008; Cameron *et al.*, 2007; Consuegra *et al.*, 2006). Like relationship marketing, Direct and Database marketing can be used to prolong and improve customer loyalty, but the latter two tend to rely on transaction marketing approaches, whilst relationship marketing has a broader and more personal approach.

Leaving aside the differences between the concepts, it seems clear that relationship marketing and CRM need to build Direct marketing strategies making use of Database marketing principles. The way to deploy all these strategies is by an effective use of another growing concept: Data Mining. The increase in the quantity of data and the decrease in available analysis time have led to a rising need for an inductive method which will assist in finding useful relationships between selected data. Data Mining is defined as the process of exploring masses of data in order to look for patterns, correlations and irregularities (Antoniou, 1997; Peacock, 1998; Ryals and Payne, 2001; Prinzie and Polen, 2008; Shi *et al.*, 2009 ). Samli *et al.* (2002); Jukic and Nestorov (2006) and Kim *et al.*, (2008) introduce data mining as the automated analysis of large data sets to identify previously unknown patterns or trends of information in data that might be used to make valid predictions. Some of the applications or tools which fall within data mining are Decision Trees, Neural

Networks, Conjoint Analysis, Regression Techniques, K-nearest Neighbour, Discriminant Analysis (Ngai *et al.*, 2009).

Edelstein (1999) classifies data mining applications into four key areas:

- a) time sequence
- b) classification
- c) clustering
- d) forecasting

This classification corresponds to different objectives which companies might follow when using Data Mining techniques. Although most data mining techniques have existed for years or decades, it is only in the last several years that commercial data mining has caught on in a big way (Chen *et al.*, 2005; Kim and Street, 2007). This has been due to the convergence in the 1990's of a number of factors: 1) the data produced by the companies; 2) the increasing data has been stored in data warehouses; 3) the computing power is affordable; 4) the competitive pressure is strong; and 5) commercial data mining software has become available (Berry and Linoff, 2005; Nai *et al.*, 2009). The relationship between data mining and the preceding concepts seems to be very straight forward as it plays an important role in the data warehouse environment.

To summarise, the increasing production of data and its storage within databases and data warehousing provides organisations with memory about how their customers have behaved in the past (Groth, 1998; Reinartz *et al.*, 2008; Vatanasombut, 2008). However, in order to design retention strategies looking at the future supported by the conceptual background of relationship marketing, counting on gathering that vast amount of data is not enough. Meaningful information has to be extracted through the use of data mining and other statistical techniques which follow the principles of Database marketing and will be translated into specific Direct marketing activities for carefully targeted customers.

### 2.3.7.1 The use of customer intelligence: customer retention, segmentation and cross-selling

Customer intelligence helps organisations to better discriminate and more effectively allocate resources to the most profitable group of customers that they wish to retain (Ngai *et al.*, 2009). Eriksson *et al.* (2007) found that customers who have experienced the impact of customer intelligence activities in the financial services industries were more inclined to respond with increased commitment to the services offered by their bank. Liu and Wu (2008) examined the effects of convenience, one-stop shop servicing, firm's reputation and expertise on both customer retention and cross-buying. This research was highly influenced by the analysis of customer retention aspects conducted by Li *et al.* (2005) and Ngovo (2004). Similarly, Puri and Rocholl (2008) highlighted how customer retention was important in the retail banking industry to establish profitable relationships with carefully selected customers.

Despite the conceptual validity of customer retention, recent research has questioned the effect of customer loyalty on profitability. Reinartz and Kumar (2003) demonstrated that customer loyalty may have no positive impact on customer profitability. Similarly, Gupta and Lehmann (2005) have pointed out that many firms spend enormous amounts of money to foster customer loyalty with little tangible results. Thus, researchers have called for more in-depth analysis to expose the myths of customer loyalty (Kenningham *et al.*, 2005) and to relate the investment in loyalty-building efforts directly to profitability metrics (Peppers and Rogers, 2004). Zhang *et al.*, (2010) have revealed that in the area of consumer packaged goods, customer loyalty is passively associated with customer revenue and customer retention, both of which drive customer life value.

Customer retention starts with customer identification. This phase involves targeting within the population. Moreover, it involves analysing customers to identify those who are or will be profitable for the company to retain (Kracklauer *et al.*, 2005). Both targeting customers and customer segmentation involves the subdivision of an

entire customer base into smaller customer groups, consisting of customers who are relatively similar within each specific group (Woo et al., 2005).

The literature of market segmentation indicates that there are two schools of thought. The behaviourally oriented school is concerned with the identification and documentation of generalisable differences among buyers groups in order to get insights into the basic process of consumer behaviour. The decision oriented school focuses on how these differences among consumers can be exploited to increase the productivity of marketing programmes (Andronikidis, 2008).

Customer characteristics are a very powerful determinant of financial services patronage by individual customers (Machauer and Morgner, 2001). For instance, lifestyle segmentation approaches provide a realistic framework of consumer driven categories to which traditional demographics can be applied (Ruddick 1990). In financial services, segmentation has been largely limited to the use of demographic or economic criteria such as profession, age, income or wealth as the main dimensions for segmenting the market (Palmer, 2004; Helgesen 2007). However, demographic and economic criteria are only rough indicators of the need structures and the reaction patterns of retail customers (Machauer and Morgner, 2001). In post hoc approaches to segmentation a heterogeneous population is analysed and segments are determined on the basis of homogeneous response patterns within the population (VRL, 2009). In 2010, the American Marketing Association concluded that, together with traditional segmentation approaches, companies and research need to think about segmentation under the terms of 'purchase behaviour', 'usage', 'benefits sought', 'intentions', 'preferences' or 'loyalty'. Amine and Smith (2009) suggested that, given the characteristics of post-modern society, traditional customer segmentation needs to be reviewed. They highlighted how marketers should adapt their segmentation to the new, complex and changing consumer realities of post-modern times, which include multi-dimensionality, unpredictability, inconsistency, search for meaning, individualism and so on. Following this approach, Griffin and Lowenstein (2001) and Best (2005) suggested a classification of customers based on customer loyalty and profitability in the financial services industry. Helgesen (2007),



based on customer profitability segmentation, combined traditional segmentation variables with more financially based figures in order to better satisfy customers' needs and to satisfy the business's needs to deliver long-term profitability. Epstein *et al.*, (2008) suggested a framework to retain and manage the relationship with customers based on segmentation and customer lifetime value as the pillars to uncover opportunities and to design strategic activities. More recently, Rosmalen *et al.*, (2010) suggested a double segmentation approach, customer characteristics and evaluation of the service attributes, to predict the response behaviour to marketing activities.

Current segmentation in the financial services industry suggests a combination of consumption patterns, customer characteristics and attitudes towards both technology and customer service in order to reveal cross-selling offerings that can appear to each segment and for financial services to differentiate themselves with an exceptional customer experience tailored around customer's preferences (Onufrey and Moskowitz, 2008). VRL (2009) in its industry report about segmentation in the financial services industries highlighted that the industry has been quite active in pursuing customer segmentation using management strategies aimed at recapturing the personal, one-to-one relationship enjoyed with customers in the past, aided by technology and multi-channel distribution strategies. It highlighted three main approaches followed by the industry when approaching segmentation:

- 1) Demographic and psycho-demographic segmentation (e.g. age, gender, occupation, lifestyle)
- 2) Behavioural segmentation (e.g. usage patterns, transaction history, product purchases)
- 3) Value based segmentation (e.g. income, wealth, loyalty, profitability).

Consuegra *et al.* (2006) analysed the impact of the perceived benefits of customers from having a relationship with their banks and demonstrated that it is possible to segment the market according to the customers' perspective on relational benefits. Cameron *et al.*, (2007) suggested a new methodology to segment financial services customers combining macro-trends with detailed personal, household and post code

level data in order to get more accurate results and which could be used at a more strategic level to help develop customer retention and marketing strategies for financial services providers. Eriksson *et al.* (2007) have called for a revisit of both the theory and the practice of segmentation to include the concept of ‘customer networks’ as inter-customer relationships have also a significant impact on the way that customers make their financial services consumption. Additionally, Andrikidis (2008) has suggested a psychographic theoretical framework to address customer segmentation in the financial services industry combining self-image, brand image and ethnic-cultural identity as the main influencing variables on acquisition drivers and behavioural patterns within the industry.

Once customers have been classified into segments or clusters, the next step in customer retention consists of consistently expanding their transaction intensity, transaction value and individual customer profitability. With regard to this, the concept of customer lifetime value becomes crucial to maximise the effort put on developing customer retention (Ngai *et al.*, 2009). Customer lifetime value analysis is defined as the prediction of the total net income a company can expect from a customer (Drew *et al.*, 2001; Betz and Datta, 2001; Etzion *et al.*, 2005). In order to increase the intensity of the transaction, the basic strategies are cross-selling and up-selling, which refers to the activities aimed at augmenting the number of associated or closely related services that a customer uses within a firm (Prinzie and Poel, 2006). In order to develop these, companies need to analyse customer consumption to reveal regularities in the purchase behaviour of customers (Aggarwal and Yu, 2002; Brijs *et al.*, 2004). These concepts of cross-selling and up-selling will be discussed in the following section.

#### **2.4 Cross-selling and Up-selling**

One of the main advantages associated with the development of customer relationships by CRM activities based on customer retention is the generation of cross-selling and up-selling opportunities. Relationships with customers may not generate sufficient profitability for traditional [financial] services providers, unless a number of products are held by an individual customer for a period of time

(Farquhar, 2005). Companies tread a delicate path between maintaining relationships with selected customers and achieving customer profitability. Selling their products appears to be a priority for companies, but as consumers become more knowledgeable and demanding on the exchange, selling has to acknowledge the empowered new customer role. Within this new scenario, the definition of carefully designed cross-selling and up-selling strategies in a tight link with customer retention has become a key objective for companies.

Basically, cross-selling means increasing the number of products or services that an existing customer acquires from a company. Thus, up-selling is defined as promoting deeper consumption of the products which customers already acquire by up-grading their current purchases' conditions, so that they are high value products<sup>3</sup>. This enlargement of customers' portfolios to existing or inactive customers, offers benefits to both buyer and seller (Sonnenberg, 1998). Because the customer is a current client, as it has been mentioned before, it is easier for any company to grow by cross-selling services to existing customers than by attracting new ones (Felvey, 1982). The two main goals of cross-selling are increasing the switching cost and reinforcing customer loyalty. Hence, both should be understood in order to report higher profitability and value to the company.

Cross-selling has been considered as one of the main relationship marketing and CRM tools to strengthen the relationship with customers (Kamakura *et al.*, 1991). As a customer acquires additional services or enlarges the ownership of those already purchased from a vendor, the number of contact points between customer and vendor increases, generating a higher switching cost to the customer (Kamakura *et al.*, 2003). As customers remain with a company for a longer period of time, the firm can learn and understand more from the customers' buying behaviour and their preferences in terms of products and timing. All this knowledge in the company's hands, allows it to satisfy their client's needs more deeply. On the other hand, when cross-selling attempts are undertaken without a supporting strategy, the

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<sup>3</sup> From this point on, the term cross-selling will be used when referring to generic strategies that could consist of proper cross-selling or/and up-selling activities. When the distinction between both was considered to be necessary, both terms will be introduced.

consequences can be the opposite. If customers are continuously bombarded with “no-sense” offerings (in terms of their needs and desires of current status) they can become less willing to re-purchase and more likely to switch companies. Due to this, an effective cross-selling strategy must be done on the basis of a well structured database (Salazar *et al.*, 2004).

In terms of its academic importance, cross-selling has received little attention by the research community. Specifically, the research on acquisition patterns in the context of financial services has been limited. Several studies have been done for consumer durables (McFall, 1969; Clarke and Soutar, 1982; Pyatt, 1964). Other researchers have focused on consumers’ sequential purchases (Boulding *et al.*, 1993; Bitner and Zeithaml, 2000). However, most of these were descriptive and explanatory giving a general overview of the acquisition process and trying to explain the factors determining the transition among different purchases. On the other hand, studies on an expanding industry such as financial services, has been considered as secondary importance to Academia. In this area, Stafford *et al.* (1982) started seeking any evidence to understand a general pattern in financial consumption. Kamakura *et al.* (1991, 2003) focused on presenting a descriptive and predictive analysis using customer’s characteristics (life stage) and service features (measured as the difficulty to acquire the service) to define a sequence at the purchase. This article of Kamakura *et al.*, using latent trait analysis to position financial services and investors along a common continuum, has been the first attempt to model cross-selling opportunities. It was followed in 2003 by further investigation by the same research team, using an extension of factor analysis to identify the best prospects for the consumption of different products. More recently, Kamakura *et al.*, (2004) have attempted to model sequential adoption of new products based on the timing of prior adoptions.

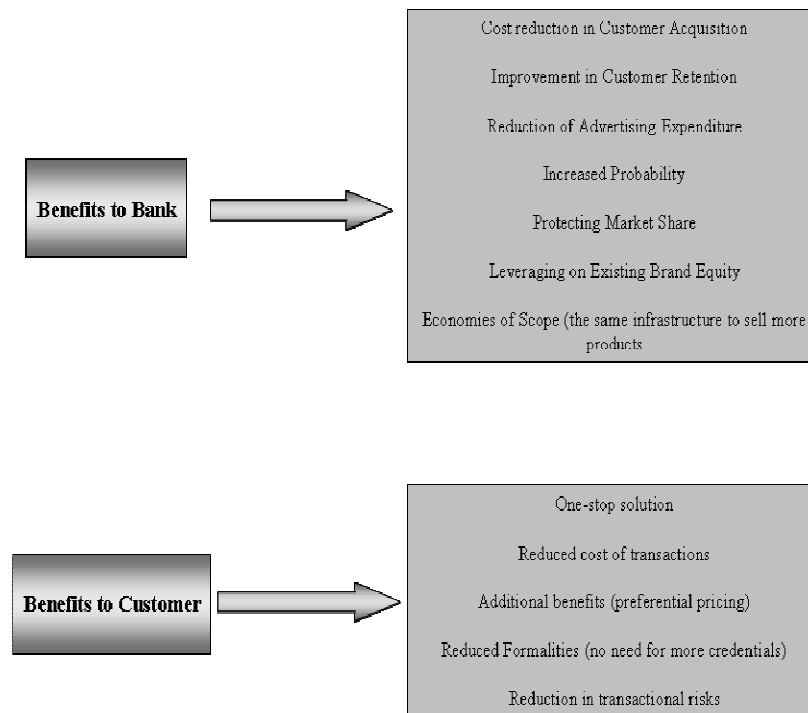
Knott *et al.*, (2002) presented four different techniques to predict what a customer is likely to purchase next using Discriminant Analysis, Multinomial Logit, Logistic Regression and Neural Nets. In 2003, other pieces of research conducted by Edwards and Allenby proposed an algorithm that is especially efficient for the definition of cross-selling opportunities and identified the limitations of the Multivariate Binomial

Probit model that had been used before in literature for that purpose. More recently, Zhang and Krishnamurthi (2004) modelled the sequential purchases in an online environment.

As Li *et al.*, (2005) recognised, some of these research projects have ignored development over time of individual-level demands in favour of a cross-sectional approach. To overcome this limitation, they modelled cross-selling opportunities using Lehmann's (1981) Ideal Point Model, in which the predicted choice probability is inversely related to the distance of an object (brands). Although their approach takes into account the implications of the Customer Life Cycle theory, they do not introduce any reference to customer segmentation and how purchase behaviour can also be affected by other socio-demographic characteristics.

Whilst cross-selling helps organisations [financial providers in this research] increase their sales volume, it also helps customers by providing them with a one-stop solution. Studies conducted in the banking industry (McGoldrick and Greenland, 1992; Lymberopoulos *et al.*, 2003; Vyas *et al.*, 2006) provide evidence that customers' willingness to buy more products from their financial providers is quite high. Due to pressures on the supply side with increased competition and reducing effectiveness of traditional marketing activities, cross-selling appears to be the alternative to traditional selling methods (Lau *et al.*, 2004). As a result, the derived relationships create exit barriers and reduce the cost of attracting new customers within the organisation (Reichheld, 1996). In fact, as customers acquire additional products or services from their usual providers, the number of contact points increase leading to higher switching costs for customers (Kamakura *et al.*, 2003). In addition to this, enlarging customers' portfolios reduces the need for traditional advertising, which leads to a pricing advantage over competitors (Reichheld and Sauser, 1990). The following figure (Figure 2.2) summarises the types of benefits that both customers and companies can obtain from the deployment of cross-selling opportunities.

Figure 2.2: Benefits from Cross-selling



Retaining customers through cross-selling is highly relevant to guarantee continuity and further development of the relationship between customer and company. In addition to this, cross-selling opportunities increase as the relationship between the two actors gets tighter (Peelen, 2005).

Although cross-selling seems to be very attractive for companies that attempt to establish long-term relationships with their customers and reinforce customer retention, its success is limited by several factors. First, organisational climate and culture have latterly been recognised as the foundation for long-term activities effectiveness (Payne *et al.*, 1996; Hughes, 1992, 2006; Cocheo, 2000). If the organisation does not move towards the ideas of customer retention and aims to be a complete solution provider rather than a product seller, any progress on achieving a closer relationship between customer and company through cross-selling will be a mere coincidence. It is not only about determining those new ideas as part of the

organisational mission, but also about starting to design actions and policies which align to them.

A second possible obstacle for full development of customer effective cross-selling activities relates to employees. This reference to staff issues is strongly linked to the culture of the organisation, and how it has a clear impact on customer engagement and other human resources aspects. As a result, a competent employee who is committed to delivering customer satisfaction is a valuable asset to the organisation who should be carefully managed (Payne *et al.*, 1996, Sonnenberg, 1998; Jones and Farquhar 2003, Vyas and Math, 2006). This has a more severe impact as, in many cases, the only contact between the customer and companies, is with their staff members.

More importantly, in the service industry, where the outcome of transference does not have a physical component, the development of the relationship, together with trust and confidence creation, is a process that depends on the front-line sales personnel. Without their involvement in the new ideas of retaining and focusing on customers, any course of action such as, for example, cross-selling can expect an obscure future.

Finally, the last factor affecting the viability of cross-selling activities is technology. A proper infrastructure to take advantage of these new business opportunities is crucial, but it requires considerable investment (Lau *et al.*, 2004; Jarrar and Neely, 2003; Vyas and Math, 2006)). Also, a clear understanding of the objectives pursued by the project is key in the selection of the best tool. Finally, this tool has to be fed with information. Peelen (2005) recognises that customer knowledge is essential in order to supply customisation and deliver the promises and benefits for both organisations and customers. Therefore, cross-selling is all about culture and real time support. The key is to have a well-trained and motivated sales force who can talk to the customer supported by a real-time information system, that is centred around customer information, to help staff understand all they need about customer's necessities, situation and expectations (Jarrar and Nelly, 2003).

Since the late 1980's, cross-selling has been the 'Holy Grail' in the market following the promise that the more products a customer holds, the less likely they are to leave, therefore the more profitable they are (Kane, 2005). Despite its potential for organisations in general and for financial services providers in particular, cross-selling has not proved its efficiency so far. There are several reasons for this lack of success. Paas and Kulijen (2001) suggest that the information requirements about customers have been somewhat bypassed by the organisation. In this way, they continue with the idea that effective cross-selling strategies require information in the order of which customers acquire their products in order to identify acquisition patterns. In addition to this, Kane (2005) points towards the emphasis that companies have put on technology over other strategic and organisational issues. Harless (2000) suggests that problems can come from internal factors such as lack of commitment of staff members or the blurred brand image that some organisations have which eventually do not mean anything to their customers. Although there are some internal factors that this research cannot attempt to solve, they will become very valuable when attempting to recommend effective cross-selling opportunities. For issues regarding the generation of customer knowledge, this study will try to approach them by suggesting an analytical framework which hopefully will overcome them.

To summarise this section, cross-selling has been recognised in the literature as a research area which deserves special attention due to its interaction to other well-known fields such as, customer retention and relationship marketing. In addition to this, the benefits that customers and organisation can obtain from the development of efficient strategies have made this field even more attractive. From the practitioners' perspective, they have been blinded by the high expectations derived from the promised benefits. This has made numerous organisations jump into the development of cross-selling strategies in conjunction with their attempts to increase their ratios of customer retention. However, something that looks so easy and logical faces some limitations for their correct implementation. Current research has started to realise those issues and therefore, new lines of investigation have been started. However, companies are still facing difficulties in implementing the promising strategies of

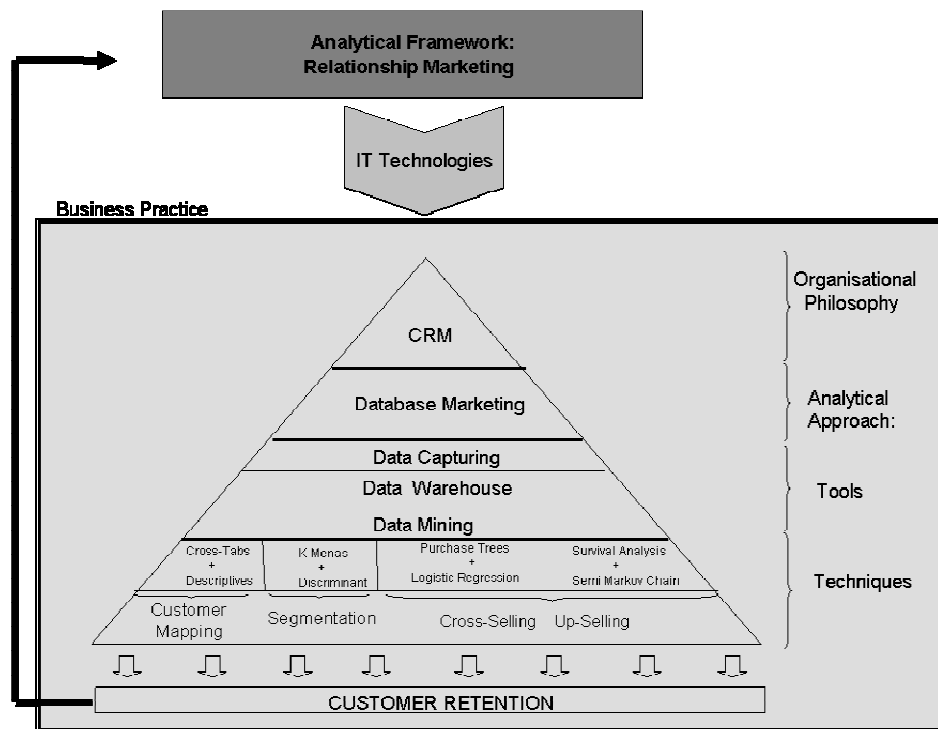


cross-selling and have begun to have doubts about their validity in the market place. Hopefully, this research will first expand, to some extent, the limited existing literature of promoting cross-selling within the customer retention context. Secondly, this study will attempt to suggest a way to overcome some of the issues identified about how to generate meaningful knowledge about customers. Finally, it is expected that the implementation of the results derived from the analysis will have a mitigating effect on negative voices that have started to question the validity of cross-selling, and its benefits.

## 2.5 Research Context Overview

This research covers a wide range of concepts and elements from different perspectives, which are highly significant. The following chart (Figure 2.3) tries to summarise and put them into context.

Figure 2.3: Overview of the research framework



This research has been contextualised within the paradigm of relationship marketing. This emphasis of relationship marketing consists of establishing long-term

relationships with customers that are (or potentially can be) interesting for companies. Although it covers not only customer acquisition, but also customer retention under the objective of building those relationships, the latter has been recognised as being more relevant due to the benefits that existing customers generate to their providers.

The reasons for this significant growth of relationship marketing within the academic environment have come from several areas. Firstly, markets have matured to the extent that competition is fierce and customers have become the scarce asset that companies are competing for. Secondly, the demand side has also favoured the emergence of relationship marketing as a consequence of customers wanting to be treated as individuals, demanding more value (service) for their money and requesting more sophisticated products. As customers' demands are more complex, customer involvement on purchase decisions increases, requiring something other than mere promises and promotional strategies. Here, trust, confidence and personal contact with the organisation have become crucial. Finally, advances in IT and systems have allowed companies to be more efficient, and more importantly, to collect, use and translate customer data into meaningful information which will assist them in the design of strategies which will effectively satisfy customers' new needs and requirements.

However, not only is the academic world showing an interest in the area. Practitioners have also embraced the concept of relationship marketing and customer retention by the implementation of the philosophy of CRM. The main emphasis of an effective management of customers has been the use of customer data. The creation of customer knowledge has been favoured by the development of databases, data warehouses, data mining techniques, database marketing principles and direct marketing activities. All those focus on gathering a complete view of the customers of the organisation, in order to communicate and offer them meaningful offers, will eventually promote customer retention and with a bit of luck, customer loyalty.

From all the possible ways that customer retention can be generated, which will be explained in due course, cross-selling has been selected for the purpose of this research. It is surprising how, despite the fact that of being a sound strategy from the practitioners' point of view, cross-selling and up-selling have received limited attention from academia. In addition to this, literature existing in customer retention, cross-selling and up-selling is to some extent, quite confusing. On one hand, cross-selling is considered to be the tool to promote customer retention and therefore, it can be used to promote the main objective of relationship marketing. However, on the other hand, previous research has stated how one of the benefits of retaining customers translates into customers acquiring more products from the same provider. Here, customer retention becomes the cause and not the consequence of cross-selling.

Bearing this in mind, and without attempting to solve the debate, this research will focus on the virtuous cycle existing between customer retention and cross-selling by explaining the benefits of both and how and they can be used in a practical environment within the relationship marketing context.

## **2.6 A critical evaluation of the literature**

Recently, Ngai *et al.*,(2009) conducted an evaluation of the research conducted on developing customer retention using data mining techniques. The main findings suggest that these areas have attracted the attention of both practitioners and academics. When evaluating the approaches used to address customer retention, research has followed a relatively broad approach. Table 2.1 summarises some of the research conducted over the last decade on customer retention.

Table 2.1 Evaluation of the literature aimed at customer retention using analytical tools

Objective	Technique	Reference
Sequence Analysis	Survival Analysis	Larivière and Poel (2005); Rosset et al., (2003)
	Sequential Pattern	Chiang et al (2003)
	Association rules	Chen et al., (2005); Kubat et al., (2003)
	Transition distribution	Prinzie and Poel (2006)
Consumption Patters	Markov Changin model	Giudici and Passerone (2002); Kim et al., (2008)
	Association rules	Jukic and Nestorov (2006)
	Neural network and association rules	Changchien et al., (2004)
	Poisson Models	Gurcich et al., (2006)
Segmentation	Decision Tree	Kim et al., (2006); Yu et al., (2005); Yan and Padmanabhan (2005); Kuo et al., (2007)
	Decision Tree and Markov chain	Ha et al., (2002)
	K-Means	Dennis et al., (2001); Fatta et al., (2000); Jiang and Tuzhilin (2007); Cho and Kim (2005); Verdú et al (2006)
	Neural Network	Chang et al., (2006); Kim and Street (2007)
	Logistic Regression	Hwang et al., (2004); Prinzie and Poel (2005); Cassab and Maclachlan (2008); Kim (2006); Knott et al., (2002)
Cross-selling/ Up selling	Neural Network and association rules	Changchien et al (2004)
	Transition Distribution	Prinzie and Poel (2008);
	Sequence analysis	Bitner and Zeithaml (2000)
	Predictive analysis	Kamakura et al (2003)

Source: Adapted from Ngai *et al.*, (2009)

It reveals that there has been a lot of research on classifying or segmenting customers, some in targeting customers aimed at direct marketing activities and less on consumption analysis. However, there appears to be no research on the theme of customer retention through segmentation and the targeting of customers for specific strategies based on the analysis of their consumption habits (sequence and pattern). This implies that effort on developing holistic approaches to customer retention has been limited, with research focusing upon the analysis of sub-elements of retention strategies. This silo approach to analysis suggests the need to conduct research that is focused, not only upon the segmentation of customers or the analysis of their “consumption baskets”, but also upon an approach combining the lessons from the segmentation literature, the output from projects aimed at understanding consumption patterns and their timings. With regard to the time dimension, Netessine

*et al.*, (2007), using stochastic dynamic programming with combinatorial optimisation to address cross-selling in the retail industry, demonstrated the usefulness of approaching cross-selling activities from a dynamic perspective in order to predict when repurchase was more likely to occur, something which Feldman (2003) also suggested in the travel services industry. Despite Netessine's and Feldman's contribution on the dynamic component of cross-selling, still these examples have not evaluated the impact of customer characteristics or how different product types can lead to shorter or longer repurchase periods.

Despite the variety of data mining techniques available to approach customer retention activities, the research conducted has tended to use only one technique, though in some cases two. However, there are not many studies offering an analytical framework using a portfolio of analytical tools which systematically can be used to design cross-selling strategies to retain customers.

When reviewing the literature, it can be observed that most of the research has been related to one-to-one marketing and loyalty programs. This suggests that research aimed at increasing the intensity of the transactions (cross-selling or up-selling) has not been so prolific (Changchien *et al.*, 2004; Prinzie and Poel, 2006). Extant literature focuses on relationship depth and length, but little research has been carried out to examine the factors that make customers buy additional services from the same provider (Reinartz and Kumar, 2003). Supporting this argument, Netessine *et al.*, (2007) recognised that cross-selling and up-selling have received more coverage in trade publications (Feldman, 2003; Peters 2004), whereas academic research on cross-selling has been quite sparse, with key contributions from Nash and Sterna-Kawart (1996) who described the application of DEA methodology to cross-sell financial services, and Kamakura *et al.*, (2004) who utilise customers databases to identify opportunities for cross-selling. In recent research conducted on cross-selling in the financial services industries, Laux and Walz (2008) have demonstrated in their examination of lending and underwriting products, that while cross-selling is not only beneficial for companies, it is also interesting from a customer's perspective.

Together with this positive effect of cross-selling for customers, Cosci and Meliciani (2007) suggested that despite the increasing competition in the financial services industries and the diversification of services conducted by companies to gain economies of scale, sound cross-selling strategies based on screening and understanding customers is not yet so developed. Moreover, Mester *et al.*, (2008) provided evidence of how Canadian banks are exploiting the customer information synergies in attempting cross-selling activities (not with a customer retention objective but aimed at profitability), and how this occurs very rarely in the European banking and financial services industry (Ongena and Smith, 2000).

Other areas of research on cross-selling have identified four key variables that may impact the success of cross-selling strategies: satisfaction, equity, trust and image (Soureli *et al.*, 2008). Following this line, Verhoef *et al.*, (2002) constructed a conceptual framework looking at the effect of trust, satisfaction and equity. However, they did not consider the effect of the interrelationships between those on cross-selling. Bloemer *et al.*, (2002) examined how customer satisfaction impacts on defection on with respect to customers' intention of concentrating more of their banking needs with other providers. Ngobo (2003) considered the impact of customers' evaluations of service experiences and customers' perceptions of the provider's capabilities to offer different types of service. Once again, these examples have ignored how customer characteristics and their needs might impact on what product to buy next from the same provider and when that purchase is likely to happen. In spite of the increasing level of sophistication in the financial services industry around segmentation and customer retention strategies, results in the industry have fallen far short of expectations; significantly, greater cross-selling ratios have not being achieved. (VRL, 2009). Still related to cross-selling, Vyas and Math (2006) highlighted the key components of successful cross-selling (Table 2.2), which include employee training, incentives, customer focus and usage of CRM tools.

Table 2.2 Evaluation of the elements of successful cross-selling

Element of successful Cross-selling	Reference
Brand name	Cocheo (2000)
Customer focus	Hughes (2002)
Motivated employees	Cocheo (2000); Jarrar and Neely (2002)
Incentives	Belsey (2004) and Sonnenberg (1998)
Contact Management	Jarrar and Neely (2002); Jones and Farquhar (2003); White (1994); Krebschach (2000)
CRM tools and systems	Lau et al., (2004)
Customer profitability	Jarrar and Neely (2002)

Source: Vyas and Math (2006)

What seems surprising from the table and the research conducted by Vyas and Math is that, in order to succeed at cross-selling, companies appear to only need a culture focused on the customer, with employees trained and incentivised on how to cross-sell to customers and CRM systems. Without trying to undermine the value of those elements, cross-selling should be about understanding customers, their needs, their consumption patterns and the time when those needs are more likely to flourish. It might be that when mentioning CRM tools and systems, the authors also refer to activities such as customer segmentation, life cycle theories, purchase behaviour and sequence analysis. However, if this is the case, not calling them out explicitly is over-simplifying cross-selling and up-selling efforts and not giving enough credit to the lessons from the research conducted on those areas.

### **Conclusion:**

This chapter has presented a review on what has been said so far, on the areas of investigation covered by this research project. First, the rationale for selecting relationship marketing as the theoretical context has been explained along with its origins and reasons for a continuous growth between practitioners and academia. By reinforcing the main goal of relationship marketing (customer retention), the second section of the chapter has brought a clear definition of what customer retention is about, why it is key and several strategies that companies could adopt under the

objective of keeping customers with their organisations. After providing an overview of where this research can be placed, from a theoretical point of view, the next step introduced the concept of CRM, which has a deep impact on the business arena. The significance of this philosophy has been examined in detail together with the impact that technological advances have in supporting this growth. Due to existing controversy and lack of clarity around the concept of CRM, it was considered necessary to provide a critical view of this philosophy by presenting both its advantages and disadvantages. In addition to this, the key concepts of customer intelligence were introduced in order to clarify how those interrelate in the organisational environment. Notions like Database marketing and Data Mining, amongst others are the tools that companies use in their tactical decisions to implement the philosophy of CRM and to achieve their aim of customer retention.

Despite the objective of retaining customers being pursued in several ways, this research has put the emphasis on cross-selling and up-selling strategies. However, in different ways both aim to increase customer consumption;– more products or more valuable products. It is significant that cross-selling has not received as much attention from research as other retention strategies (i.e. loyalty programs). This limited interest in cross-selling from academic research came across as quite alarming due to the potential gains from practitioners and firms. This reference to the practical arena has a huge impact on the methodological decisions made during the research process, decisions which will be explained in the next chapter. Also, the fact that cross-selling and up-selling seem to have lagged behind other areas, regarding research activities, was a key driver when conducting the research. This rationale will be detailed in the following section. With the theoretical background in mind, the following steps, reflected in Chapter 3, are about explaining and justifying the methodology and the research process followed. Together with these explanations: (1) the main drivers to start the project (i.e. literature gap, practitioners' needs); (2) the epistemological position; (3) research strategy; and (4) research techniques will be detailed and explained in order to provide a clear picture of the research process and a better understanding of its contribution.



**Chapter three:**  
**METHODOLOGY**

## **Introduction**

The introductory chapter discusses how the Financial Services Industry has evolved from the comfortable position where customers have been taken for granted, into a state where competition has increased and customers have become a valuable asset to be kept as close as possible. In this situation, the concepts of customer retention and relationship marketing seem to have strong contributions to make. Chapter 2 has probed into the academic literature in order to gain a better understanding of relationship marketing and similar concepts, like customer retention, CRM, cross-selling and up-selling. It can be inferred from both chapters that the financial services industry is at the right stage to adopt some of the concepts developed in the Literature Review Chapter.

While there has been much research carried out on relationship marketing and customer retention, it tends to be very conceptual, without exploring the practical implications. Moreover, with regard to cross-selling and up-selling, extant literature reveals a significant gap. Firstly, limited research has been conducted in these areas. Secondly, where research has been conducted, it has focused on consumer durable products. These differ in many respects from financial services, hence, the insight from this research cannot be applied strictly to the acquisition of financial products. The current situation with the financial industry and the gaps identified in this research, are key elements defining the structure and key points of this methodological section. In conclusion, the literature review, which was explored to show an understanding of how cross-selling strategies can be applied in the financial services industries to enhance customer retention, has highlighted the following issues:

- Cross-selling within the customer retention framework has been treated in a conceptual manner, with limited intention to describe how to design or deploy strategies for real customers and organisational data.
- Research into customer retention and cross-selling in the financial services industry has not been fully explored. Existing studies have taken a relatively narrow approach, looking at either product inter-connections or assessing the

customer propensity to cross-sell in general. However, there has not been a significant attempt to combine customer characteristics, products and a dynamic component when designing cross-selling strategies.

- Several studies have been tried to model cross-selling strategies for consumer durables, with limited attention to the service industry and products with different maturity times.

As a result of this insight, the original research objective for designing cross-selling strategies has been refined. More focused, this thesis aims to suggest a systematic method to identify and design cross-selling and up-selling strategies in the financial services industry as a vehicle to enhance customer retention. The research objectives are:

1. To assess to what extent customer retention is a top priority within the financial services industry.
2. To assess to what extent cross-selling is a useful strategy to retain customers in the financial services industry.
3. To suggest and assess the “Who-What-When” Framework to identify and design long-term cross-selling strategies in real life examples.

The original objective of this research was to develop a method to deploy cross-selling in the financial services industry, yet given the timid attempts made by previous research to address objectives one and two, it was decided that it was necessary to establish how customer retention and cross-selling were perceived by the industry as strategic objectives to be achieved currently before examining cross-selling strategies,. The addition of these two research questions has impacted the research methodology and how it was conducted.

This chapter covers a range of issues regarding the design and the implementation of research from its broader perspective, introducing the epistemological position, to the detail of techniques used to analyse and obtain results. The structure of this section starts with motivations which have drawn the research towards cross-selling and customer retention in the relationship marketing framework. This interest has been

translated into several questions and one hypothesis that will be answered and tested in further chapters. Although the process of searching for answers seems relatively easy, it really depends upon how much the researcher understands the nature of knowledge creation (epistemology). This will determine the conduct of the investigation in terms of strategies, methodologies, methods and techniques. All these elements will be developed throughout this chapter.

### **3.1 Research Philosophy**

Any research project should take into consideration epistemology and ontology, as those over-arching terms relate to the development of knowledge and the nature of that knowledge (Saunders *et al.*, 2009). As Johnson and Clark (2006) highlight, researchers need to be aware of the philosophical research strategy given that it has not only a significant impact on the research process, but also on the understanding of the research questions. Burrell and Morgan (1982) summarised the main research philosophies used for management research as:

- Positivism: reality is external, objective and independent of social actors. Only observable phenomena can provide credible data. The end product of this research is to develop law-like generalisations similar to those produced by the physical and natural sciences (Remenyi *et al.*, 1998).
- Realism: reality is objective. It exists independently of human thoughts and beliefs. However, it is interpreted through social conditioning. In this line, Bhaskar (1989) argues that in order to understand reality, it is necessary to understand the social structures that have given rise to the phenomena under analysis.
- Interpretivism: reality is socially constructed. It is subjective and open to change. Knowledge is subjective and focuses upon the details of a situation, a reality behind these details, subjective meanings and motivating actions.
- Pragmatism: reality is understood as something external. Knowledge derives from both observable and subjective meanings, depending on the research questions. It is primarily focused on practical applied research integrating different perspectives to help interpret the data.

From those definitions, it can be determined that, ontologically, there is a clear dichotomy between Objectivism (Positivism and Realism) and Subjectivism (Interpretivism and Pragmatism) (Saunders *et al.*, 2009). Whilst Objectivism refers to the position that social entities exist in reality, external to social actors and, therefore, scientific methods can be used to know them in reality, Subjectivism holds that social phenomena are created from the perceptions and consequent actions of those actors concerned with their existence. From a Subjectivist perspective, interpretation and personal involvement are crucial to understand meanings motivating social actors and which configure their realities. From an epistemological point of view, while Objectivism advocates using quantitative techniques to collect and analyse data from reality (Hunt 1991), the Subjectivism approach rejects the quantitative approach in favour of a more qualitative one in order to describe what has been observed (Seale, 1999).

This debate between Objectivism and Subjectivism seemed to have found a solution with Hunt's contribution to scientific realism (1990). Mäki (1990), states that Scientific realism is based on the assumption that scientific theorising is the most reliable way to find out what there is in the world. Scientific realism is based on four propositions: (1) the world exists independently of its being perceived (classical realism); (2) the task of science is to develop genuine knowledge about that world, even though such knowledge will never be known with certainty; (3) all knowledge claims must be critically evaluated and tested to determine the extent to which they do, or do not, truly represent or correspond to that world (scientific method); and (4) truth is an appropriate goal for marketing (and social) theory and research. Building upon this, Hunt (1990:11) states that:

“Applied to marketing and social science, scientific realism maintains that, to the extent that there are theories that have long-run success in explaining phenomena, predicting phenomena, or assisting in the solution of pragmatic problems in society, we are warranted in believing that something like the postulated entities and their structure or relationships exists, that is, they truly represent or correspond to reality external to the theorist.”

Peter (1992), argues that scientific realism agrees with the fact that no single approach to science guarantees scientific progress, therefore in order to validate the results, scientific realism advocates for long-term success of the measures used (theory testing research that seeks general truth), and contact with reality in order to make sure that results make sense within their context.

Brglez (2001) describes scientific realism as a philosophical perspective which views reality as being independent from thought, knowledge and language, and sometimes as agents in social reality. The existence of “unobservables” can be approached by the scientific method in order to identify explanations for observable regularities and events (Mäki, 1990). In relation to this point, Hunt (1991) determines that scientific realism can be used to provide evidence of both observable and unobservable entities. Therefore, through the observation of reality data, knowledge about latent (unobservable) dimensions (i.e. motivations, beliefs) can be established (Wendt, 1999).

In conclusion, (1) given the scope of scientific realism, where reality is something that exists and that can be approached through the scientific method; (2) it offers the possibility of using a wide range of research techniques to approach knowledge and reality; and (3) that it approaches the validation process combining observations (i.e. testing, results generalisation), and the quality check of assessing those results within their social context, are the reasons to use Scientific Realism as the framework to conduct this research.

### **3.2 Research Strategy**

The epistemological position determines how the research strategies are used in this study. Blaikie (2003), states that a research strategy provides logic, or a set of procedures, for answering research questions, particularly “what” and “why”. In this case, the use of scientific realism opens the research process to several strategies.

From the research questions presented, it is postulated that a hybrid approach is more suited to fully respond to both the qualitative and quantitative approaches. Therefore,

a hybrid structure is also suitable when defining the research strategies adopted. Blaikie (2000), summarised four basic research strategies:

- Inductive: aimed at deriving theories from data and patterns
- Deductive: aimed at testing hypothesis about some phenomena
- Retroductive: aimed at identifying underlying principles
- Abductive: aimed at discovering the motivation underpinning social situations.

From the four possibilities stated above, the hybrid approach to be used is a combination of the inductive and deductive strategies. For the qualitative research questions, induction is the most suitable approach. It begins with the collection of data followed by generalisations that are derived by using logic. The quantitative questions are addressed using deduction. Deduction involves the development of a theory that is subjected to a rigorous test (Saunders *et al.*, 2009). It is the dominant research approach in the natural sciences, where laws present the basis of explanation, allow the anticipation of phenomena, predict their occurrence and therefore permit them to be controlled (Collis and Hussey, 2003).

### **3.2.1 Induction**

Induction refers to the way that scientists go about their work. It basically consists of obtaining detailed, observations and measurements, which are systematically analysed to generate knowledge by means of experimental or comparative analysis. It is based on the positivist assumption that a universe consists of discrete and observable events. The inductive strategy should start by leaving aside all preconceptions about the research question, the data and its relationships. This implies that the outcome from the research is not anticipated. In the absence of prior presumptions, the main task is to analyse the data collected by using inductive logic to draw generalisations and regularities (Easterby-Smith *et al.*, 2008). When regularities appear in a large proportion of the data, one can be confident that the generalities are real and not the result of data sample increases.

Wolfe (1924) and Hempel (1966) have summarised the inductive research strategy in four stages:

1. Facts are observed without evaluating their relative importance;
2. Facts are analysed, compared and classified, free from hypothesis about their behaviour or relations;
3. The analysis generalisations are obtained by establishing relationships;
4. Generalisations should be tested for further analysis.

The reason for selecting this research strategy relies on the fact that part of the project examines the data using statistical and data mining techniques, in order to discover (generic or specific) retention strategies, via cross-selling. During this stage, there are no assumptions about the number of segments, the products that should be offered, or the timing of the offer. However, once the data has been analysed and the results properly tested, the next step consists of establishing the features of those retention strategies, based on the relationships identified.

Some of the criticisms associated with the inductive strategy are based on the difficulties of carrying out research without any kind of preconceived ideas of what can be expected from the data (Blaikie, 2003). Moreover, questions arise about its generalisation power (Saunders, 2009). The use of samples of data, whether random or not, do not represent the total population, therefore the results may be influenced by the subjects under analysis. Moreover, the analytical tools are not perfect, each one has limitations or assumptions, therefore, the results can also be dependent upon them. The only way to go beyond these limitations is to repeat the research on other samples and with other techniques, continually reviewing the results.

### **3.2.2 Deduction**

The logic of deductive research strategy is the reverse of the inductive strategy. Rather than theory being the outcome of research, it has to be produced, borrowed or invented at the outset (Blaikie, 2003). Deduction possesses several important characteristics. First, there is the search to explain associations between variables. Further, in order to facilitate replication, the research process needs to use a highly



structured methodology to ensure reliability (Gill and Johnson, 2002). Generalisation is the third characteristic and is aimed at identifying regularities in social behaviour, which would allow us to make inferences about the future (Saunders *et al*, 2009). Robson (2002), lists five sequential stages in the deductive research:

1. Deducing a hypothesis from the theory;
2. Expressing the hypothesis in operational terms, which propose a relationship between two specific concepts;
3. Testing the hypothesis;
4. Examining the specific outcome of the inquiry (it will either confirm the theory or indicate the need to modify it); and
5. If necessary, modifying the theory in the light of the findings.

The task of research using the deductive research strategy is to put theories to the test and establish whether or not the theory proposed matches the available data. In order to do this, it is necessary to deduce hypotheses which will be tested through the relevant data collected (Blaikie, 2003). In the deductive strategy, the concepts in the hypothesis (research questions) that have been deduced from the theory determine the data to be collected. These hypotheses will also state the relationship between the measures of the concepts and the form of the relationship that was hypothesised (Willer, 1967).

### **3.2.3 Induction vs Deduction Debate**

The claims made about the status of the theories in these two research strategies are very different. Creswell (2002) summarised the major differences between deductive and inductive approaches to research (table 3.1):

**Table 3.1: Induction and Deduction**

Induction emphasises	Deduction emphasised
<ul style="list-style-type: none"> <li>* Scientific principles</li> <li>* Moving from theory to data</li> <li>* Collection of quantitative data</li> <li>* Application of controls to ensure validity of data</li> <li>* Operationalisation of concepts to ensure clarity of definition</li> <li>* Highly structured approach</li> <li>* Researcher independence of what is being researched</li> <li>* Necessity to select samples of sufficient size in order to generalise conclusions</li> </ul>	<ul style="list-style-type: none"> <li>* Gaining understanding of the meanings human attach to events</li> <li>* Close understanding of the research context</li> <li>* Collection of qualitative data</li> <li>* Flexible structure to permit changes of research emphasis as the research progresses</li> <li>* Realisation that the researcher is part of the research process</li> <li>* Less concern with the need to generalise</li> </ul>

Source: Creswell (2002)

Despite the differences presented above, the divisions between deduction and induction do not seem so rigid. Actually, it is perfectly possible to combine both within the same piece of research, but also, it is often an advantageous strategy as each research strategy overcomes the downside of the other (Saunders *et al.*, 2009; Hakim, 2000; Buchanan *et al.*, 1998). Related to this, Blaikie (2003) suggests the combination of both strategies: the deductive strategy determines the hypothesis, or hypotheses, that need to be tested and depending on their formulation, the type of data needed to be collected; then the inductive strategy will test those (usually with large quantities of data) and validate and generalise the results. Following this view, the research strategies used for this study are a combination of induction and deduction in order to satisfy the research questions and the research approaches (deduction for qualitative and induction for quantitative) characterising this thesis.

### **3.3 Research Design**

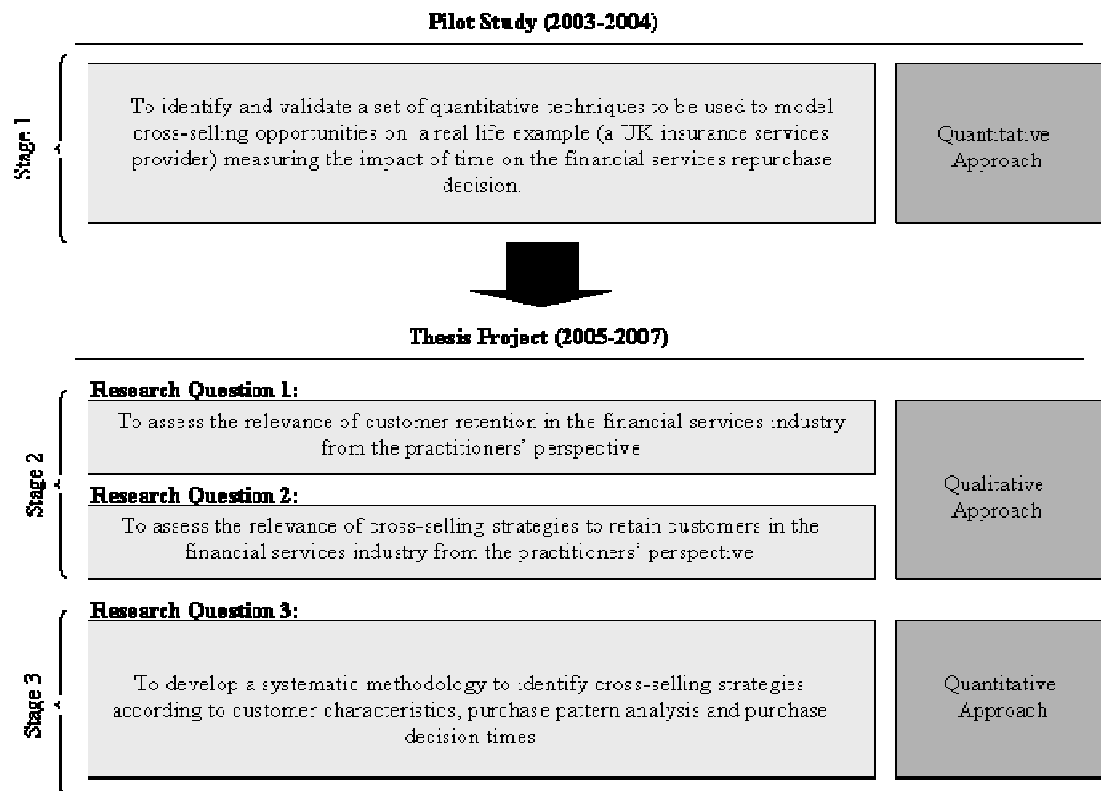
After evaluating the existing information about cross-selling and once the gaps on the field are identified, the next step focuses on designing the research approach in order to answer to the questions stated before. Scientific realism is the epistemological position underpinning this thesis, which has guided the selection of a hybrid research strategy (deduction and induction) and, as it is reflected later on the chapter, the case study has also been selected as research. All of these will influence

the data collection process and will also support the validation of the results and the response to the research questions.

### 3.3.1 Research Overview

Figure 3.1 summarises the three main stages of this research project, highlighting the main objectives and the research strategy followed at each stage.

Figure 3.1 Research Process Overview



The first stage (the pilot study) aims to validate a systematic approach to design cross-selling strategies by taking into account the time dimension on the repurchase decision. It was conducted in 2003-2004 using a quantitative approach on a sample of the transactional and customer base provided by a financial services provider (Company E). The main results of this project highlighted that, among several techniques to model the repurchase timing, Survival Analysis was the most useful, given the dichotomy of the possible outcome (buying or not buying) and its fit with the way that the survival equation is built. As well as validating the use of this

technique, it also suggested the need to take into account customer needs and product acquisition patterns when considering cross-selling models. It was clear from the results that decision timings differed from customer types and also depended on the products previously acquired. These outputs had a crucial impact when implementing the systematic analytical framework (Stage 3) to deploy cross-selling strategies within the case studies.

Stage 2 of the project aims to answer research questions 1 & 2. The first question asks how the financial services industry perceives customer retention as a relevant strategic objective to operate in a highly competitive environment. After stating that customer retention is a priority, the next objective focuses on assessing the value of cross-selling as the vehicle to promote customer retention in that industry (research question 2). This stage is conducted using a qualitative approach combining several rounds of face-to-face semi-structured interviews and the analysis of internal documentation provided by the participants.

The final step (Stage 3) follows from testing the validity of customer retention and cross-selling in the financial services industry. Once it is accepted that these are perceived to be sound strategies for respondents, Stage 3 provides help to companies to develop cross-selling strategies by using a systematic approach to identify them. However, without validation from industry, any attempt to develop a modelling framework would have been a mere conceptual exercise, with limited impact on the business arena and poor opportunities to be tested, and successfully executed in real life examples. As previously stated, the definition of this last stage is strongly influenced by the results obtained during the pilot research and enables the model to become more comprehensive and revealing about the differences between customers, and of the relationships between products. Consequently, in order to address research question 3, this stage is purely quantitative, using several analytical techniques applied to customer and transactional databases, to discover the best way of identifying and modelling cross-selling opportunities.

### **3.4 Research methods:**

Traditionally, research methods have been divided into two main types: qualitative and quantitative. In the research concept, “method” denotes data collection and analysis.

#### **3.4.1 Quantitative Method**

Quantitative research is an approach to systematic investigations with a scientific character, which seeks to numerically understand phenomena, properties and their relationships using mathematical models, theories and hypothesis (Blaikie, 2003). When quantitative methods are selected, it can be expected that there is limited contact between the researcher and those people under analysis. This lack of personal involvement reinforces objectivity in the research. This is clearly linked to the analytical analysis suggested in this study, which also relates to Scientific Realism as the epistemological position adopted. This approach could be described as being very structured with clear stages determined before-hand.

For this study, the quantitative method has responded to the objective of using a systematic analytical model for identifying cross-selling opportunities to promote retention by taking into account customer characteristics, consumption patterns and time, as determinant factors of these cross-selling opportunities. This quantitative method involved the analysis of the consumption and customer data obtained from the transactional databases of the two main companies (Company A and Company B). From receipt of the data during summer 2005 until its analysis in spring 2006, there was no personal contact between the firms and the researcher about the nature of the data and possible results. This distance was established in order to prevent any possible bias that the sharing of information could generate. The analysis of the databases was conducted using statistical and data mining techniques that, with exceptions, had already been tested in the pilot study. A further explanation of the analysis and techniques will be presented in more detail in the following sections.

#### **3.4.2 Qualitative method**

In addition to the quantitative method, this study has also adopted a qualitative approach. Chisnall (2001) states that the essence of qualitative research is its search

for a deeper understanding of factors and that it probes rather than counts. Traditionally, qualitative research requires certain involvement between the researcher and the social world. It allows the researcher to become an insider in the problem situation to discover the circumstances of the participants. This goes hand-in-hand with the ideas supported by Scientific Realism and the induction strategy, about taking into consideration the social actors and their circumstances when trying to conduct a research project (Brglez, 2001).

The qualitative method was used to address research questions 1 and 2 (assess the relevance of customer retention and cross-selling in the financial services industry). This involved semi-structured interviews with a sample of the Directors and Managers from both companies. Participants were selected according to two principles: seniority and function. Regarding the first criteria, senior members were approached in order to ensure high visibility of the organisational challenges and direction and also seeking some level of influence on determining the future strategies of the companies. Regarding their functions, the target was marketing, market research and business development functions, to seek alignment to the relationship marketing framework of this research and clear understanding of the topics of discussion. During these face-to-face meetings, the state of the financial services industry was explored: this included the past, present and future of each organisation and the relevance of the concepts being examined for both the industry in general, and for them in particular. There were nine meetings with each company (Company A: Marketing Director, IT Director and Market Research Manager; Company B: Executive Director, Business Development Director and IT Director). On average each meeting lasted two hours. At the end of the qualitative approach, several additional meetings were arranged with the companies in order to discuss some of the results obtained from the quantitative analysis in order to validate the results externally. As previously mentioned, in order to ensure the objectivity of the quantitative approach, no effort was made to understand the strategy of the respective companies, their current positions towards customer retention <sup>4</sup> and their customer base profile. This lack of information prevented biased preconceptions and avoided

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<sup>4</sup> The only information held was that none of the companies have started any active cross-selling or retention strategies.

influencing both the definition of the cross-selling strategy and also the validation of the analytical model suggested.

### **3.4.3 Quantitative vs Qualitative Approach**

Although, traditionally, quantitative research has been considered as the orthodox method to use in research due to its objectivity, it also has some limitations (Howe and Eisenhart, 1990; Sayer, 2000). For example, it cannot always capture the richness, complexity and depth of the questions. Also, the use of experiments to obtain data is not always possible in some types of research (i.e. too difficult to replicate, too many variables). Finally, even when data is obtained and analysed in a quantitative way, social research attempts to derive generalisations or theories from the interpretation of those quantitative results. When interpretation is included in the process, there is room for subjectivity. Hence, the objectivity claimed to be ensured in the quantitative method is dismissed (May, 2002; Holliday, 2002). On the other hand, qualitative methods have been charged with subjectivity as they are based on interpreting what social actors share with the researcher to describe, explain or generalise. Moreover, there are difficulties in corroboration and replication within qualitative research due to the individuality of the units under analysis. The following table summarises the characteristics of both positions:

**Table 3.2: Characteristics of the quantitative and qualitative Paradigms**

	Qualitative approach	Quantitative approach
Technique	Qualitative techniques	Quantitative techniques
Objective	Concerned with understanding participants' behaviour from the frame of reference	Seeks the facts or causes of social phenomena without advocating subjective interpretation
Approach	Phenomenological approach	Logical, scientific approach
Measurement	Uncontrolled, observational data	Obtrusive, controlled measurement
Researcher position	Subjective, insider's perspective, close to the data	Objective, outsider's perspective, distance from the data
Method	Inductive, exploratory, expansionist, descriptive, discovery orientated	Deductive, ungrounded, verification - oriented, confirmatory, reductionist, inferential
Orientation	Process oriented	Outcome oriented
Evaluation	Validity is critical: rich, real and deep data	Reliability is critical: real, hard and replicable data
Scope	Holistic: attempts to synthesise	Particularistic: attempts to analyse

Source: Adapted from Reichardt and Cook, 1979

Seth (1979), stated that qualitative research has become more sophisticated through repeated use by industry researchers. By relying, relatively exclusively, on quantitative research methods, marketing scholars not only miss out on the value of such methods, but perhaps also encourage certain method bias into their work (Deshpande, 1983). Several scholars have suggested that quantitative methodologies emphasise reliability issues, often exclusively to validity whilst qualitative methodologies emphasise validity while down-playing reliability (Deutscher, 1970; Merton, 1957, Rist, 1977).

In order to overcome the downside of both methods, the use of several methods has been suggested. This procedure would lead to the use of an appropriate mix of both quantitative and qualitative methods, so that the weakness of one set of methodologies is compensated for by the strength of the other and vice versa (Deshpande, 1983). If the view is accepted that every single method is biased, then the use of a collection of methods should be considered as the answer to reduce the effect of peculiar biases. Brewer and Hunter (1989) support the approach that uses a combination of methods which have complementary strengths, as the strategy to tackle a research problem. As a result, validity and reliability will be obtained without any trade-offs.

### **3.5 Research Questions**

The literature review helped to narrow down the original research objective of defining cross-selling strategies in the financial industry through the use of quantitative techniques. Additionally, the decisions made about epistemology and research design, have had an impact on how to define the research questions of this method. Before trying to address cross-selling, the inductive strategy, using a qualitative approach, will be used to answer the following two questions, which has been defined according to the research objectives introduced at the beginning of the chapter:



### Research Question One:

*Is customer retention a top priority for the strategic objectives of financial services providers?*

If customer retention is such a priority, then the research project could attempt to answer

### Research Question two:

*Is cross-selling a useful strategy to retain customers in the financial services industry?*

Once the relevance of customer retention and cross-selling has been demonstrated in the industry, the next step focuses on testing the Who-What-When framework to deploy cross-selling strategies. Here, the deductive strategy and the quantitative approach come into play. As previously mentioned, an earlier attempt to model cross-selling using quantitative techniques (pilot study) suggested that customer characteristics and consumption patterns also had an impact on the probability of customers acquiring more products. With this result in mind, the last research question can be presented as follows:

### Research Question three

*Do Cross-selling strategies have to be shaped by taking into account who is buying, what he/she buys and when he/she buys? Therefore, is the Who-What-When framework applicable in the financial services industry?*

This research question, split into two sections, has been derived from the conceptual framework associated with segmentation, will be tested by looking at the transactional data bases of two financial services providers. In contrast to the previous approach, this section will be solely quantitative, using statistical techniques to firstly, determine whether a single or several cross-selling and up-selling strategies need to be designed and secondly, to fully deploy the adequate number of strategies.

### 3.5.1 Pilot Study

Research Question Three was partially derived from the results of a pilot study conducted in 2003-2004. The pilot was conducted during research for the MSc by Research dissertation<sup>5</sup>, which was a precursor for the main study presented here. The objective of that project was to apply a survival analysis technique to predict when cross-selling opportunities would occur, with the objective of retaining customers. Survival analysis had been fully used in medical research to predict survival rates after following different types of treatments.

This technique was applied to a transactional database comprising a sample of 4,000 customers of an international financial services provider. The data referred only to saving products sold in the UK and contained both customer and consumption data. A critical evaluation of the initial results revealed several gaps in the approach. Firstly, cross-selling was examined solely from a time perspective, without taking into consideration customer characteristics. The analysis was repeated to test if the results were different by gender and age. The findings supported this new working hypothesis and as a consequence it was clear that cross-selling should also be examined by including customer segmentation. Secondly, the initial analysis has been done without taking into account the different types of products under the savings category (i.e. ISA, Protection, Retirement plan). Product interconnections had not been considered. As a consequence, it seem convenient to broaden the scope of the research by taking into account the different types of saving products offered by Company E in order to approach consumption pattern analysis.

The combination of these limitations was the origin of subsequent development of the concept of the “Who-What-When” framework. This suggests that the creation of cross-selling and up-selling strategies needs to account for differences in customer needs and consumption depending on their position within their respective life cycles (Who). As customers have different needs, their consumption patterns will differ and therefore the products acquired will lead to different options depending on who is

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<sup>5</sup>Salazar, M. (2004) “CRM in the Insurance Industry: an attempt to discover cross-selling and retention strategies” – MsC by Research – The University of Edinburgh – Management School – Sept. 2004

making the decision (What). Finally, if different customers have different needs, then these will be satisfied at different times in their life cycles and therefore the purchase sequence will vary across segments (When).

The “Who-What-When” framework was tested on the data set, which was split into two random sub-samples to compare the consistency of the results. This time the analysis took into account both the socio-demographic data (i.e. Age, ACORN, gender, location) and also the different types of saving products offered by Company E. In order to bring the framework to life, several analytical tools were tested. The final set selected was k-means clustering technique for the segmentation (Who), Cox regression and probability analysis for the consumption pattern (What) and Survival curves for the time dimension (When). The conceptual framework and its application were published in the *Journal of Financial Services Marketing* (Salazar *et al*, 2007) and presented in several Marketing conferences (E-BRF, Finland, 2004; EMAC, Italy, 2005; AMA, Ireland, 2005; AMS, USA, 2006 and 2007).

Nevertheless this research had several limitations. Firstly, the analysis was based on a sample of the population of consumers of Company E, whose extraction process was not controlled. This added doubts about the validity of the sample and whether it was an extremely good or bad sample. This made it desirable to examine a whole transactional database of a company to establish the relevance of the results. Secondly, whilst examining several products, the analysis was conducted on only one product category. In order to fully understand consumption patterns, it was also desirable to analyse datasets including two or more product categories. In addition to this, testing the framework was done using only one company, so in order to validate the framework more participant companies should be used. Finally, the approach from the pilot, was merely quantitative. It failed to take into account the views of the company towards customer retention and cross-selling. This suggested that, before replicating the framework with other participants, the quantitative analysis should be fully aligned with the participant’s views of customer retention and that it was necessary to establish the value of cross-selling in the industry.

From the results of the pilot study, it was clear that there were differences in terms of consumption and customers' characteristics. For example, the age of customers have an impact on the types of products acquired. Also on the times of such purchases, the marital status, the length of the relationship with the company and the ACORN<sup>6</sup> classification, defined the consumption behaviour. As a result, the research project grew in complexity by suggesting the need to break the analysis into three stages: segmentation (WHO), purchase acquisition pattern (WHAT) and purchase acquisition sequence (WHEN). In order to satisfy the requirements of the new approach, a few techniques had to be tested to be included in the final version of the project. Some of these techniques were rejected due to their limitations or inapplicability on the data under analysis. For example, Discriminant Analysis was dismissed due to the assumption of linearity when segmenting clusters; Time Series Analysis was not appropriate due to the nature of the products analysed where seasonality concepts did not make too much sense; some probabilistic methods to predict repurchase were not used due to the assumption of independence between products acquired. Furthermore, several techniques were accepted as being suitable for this kind of analysis. Therefore, under the segmentation objective, K-means Clustering Techniques were selected. In order to understand the acquisition pattern, Purchase Trees and Logistic Regression were used. Finally, the impact of time was included by applying the original idea of Survival Analysis techniques, mainly using Cox Regression.

The results obtained clearly suggested the existence of five clusters of customers who differed not only in their socio-demographic characteristics, but also in their consumption and acquisition timing. This indicated that a common retention strategy based on cross-selling was not suitable for this financial services provider. The objective then, was to confirm this assumption by running a more ambitious and holistic analysis. There were several reasons for recommending this approach. First, the data set was quite small (just 10,000 customers), as it was a sample of the whole customer data base of Company E. This raised some questions about the suitability

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<sup>6</sup> ACORN lifestyle is a database of 44 million individuals who are rated 0-100 according to their propensity to have a product or service. In total, 380 lifestyle attributes can be selected.

of representing the whole population (customer base) of Company E<sup>7</sup>. For the greater analysis, the emphasis would be put on analysing the total customer data base(s). If there was still doubt about the possibility of generalising the results to the industry (based on one case), at least there would be an exhaustive understanding of a company's customer population. This would match the objective of offering a practical piece of research which financial service providers could use. Second, it was considered that the research project would be more complete with a proper understanding of the company or companies, under analysis. This depth could be obtained by having personal contact with the company via interviews, report analysis, discussions with industry organisations and members of the management teams of the companies, and use of any other available information.

The idea of offering the right product to the right customer, at the right time, has been used constantly in marketing research (Hunt, 1983). Additionally, it is also one of the objectives pursued by relationship marketing. The existing relationship and the flow of information between customers and their providers make it easier to define an ideal offer. However, when designing cross-selling strategies, a generic retention strategy does not seem sensible amongst heterogeneous customers. Previous research has proved the value of segmentation by identifying different groups of customers with homogeneous needs/characteristics, for marketing purposes (Greenberg and Schuartz, 1989; Reynolds, 2006). In this regard, the Customer Life Cycle theory has already shown that customers' needs evolve, and this is why understanding the products and the relationship between them is crucial (Blundell *et al.*, 1994; Cocco *et al.*, 2005). Depending upon the stage at which customers are in their life-cycle and on the products acquired, time seems to have a relevant impact on the repurchase decision (Li and Wilcox, 2005)

To recap, the creation of Research Question Three comes from the combination of the theoretical background, from which the conceptual framework underpinning the research was derived, and from a pilot study, from which the structure of the "Who-What-When" framework was suggested.

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<sup>7</sup> Data sample of 10,000 customers.

In summary this research addresses three main research questions in order to fully achieve the research objectives introduced previously.

Research Questions:

1. Is customer retention a top priority for the strategic objectives of financial services providers?;
2. Is cross-selling a useful strategy to retain customers in the financial services industry?, and
3. Do Cross-selling strategies have to be shaped by taking into account who is buying, what he/she buys and when he/she buys? Therefore is the Who-What-When framework applicable in the financial services industry?

### **3.6 Research Technique:**

According to previous explanations and taking into account the research objectives, the research technique selected for the study was the case study. Runyan (1982) defined the case study method as the presentation and interpretation of detailed information about a single subject; whether an event, a culture, an organisation or an individual life. The case study method is justified in terms of its inherent suitability for tasks such as describing a participant's (individuals, countries, organisations, communities) experience by developing idiographic interpretations of that experience, and also developing context-specific predictions, plans and decisions. In addition to this contribution, Yin (1984), offered another definition of a case study, as an empirical inquiry that investigates a contemporary phenomenon within a real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which multiple sources of evidence are used. Cavane (1996) adds that case study research investigates predefined phenomena, but does not involve explicit control of variables: the focus is on an in-depth understanding of a phenomenon and its context. Although manipulation of the variables is not possible in this type of research, Lee (1989) states that theoretical constructs can be defined and empirically evaluated and measured. Finally, Gillham (2002) asserts that a case study can be defined as a unit of human activity embedded in the real world, which can only be studied or understood in context, which exists in the here and now.

Case studies also have been used for various purposes: exploratory, descriptive and explanatory research. Gummesson (1991) also suggested the suitability of case studies to generate theory (Blaiki, 2003). Darke *et al.* (1998) states that the design and determination of a case study project, which will warrant an adequate answer to the research question(s), can be very difficult and challenging. Moreover, data collection can be time consuming and tedious (Cavaye, 1996). Due to the deep understanding expected to be obtained from social actors, and the time to get it, some companies and organisations might not be willing to participate.

Case study research may adopt a “single-case” or “multiple case” design (Darke *et al.*, 1998). The former is suitable when the subject of analysis is a unique or rare case. The use of several case studies allows for comparison, as it investigates a particular phenomenon under diverse circumstances. From a positivist perspective, an approach consisting of several case studies can be used to predict similar results. Benbasat *et al.* (1987) and Yin (1994), suggest that the use of multiple case studies can strengthen the research findings of a positivist epistemological research. Based on these propositions, this study is closest to the multiple case studies approach as it focuses on two main cases (Company A and Company B), and on a third case study (Company E), which constituted the pilot study and, therefore, one of the first stages of the research. Although it is still a small number, the validity of the results is less questionable if similar conclusions are found on several organisations. Obtaining similar results from several participants mitigates the question around generalisation when using the case study technique.

From a social realism perspective, case study research is an appropriate strategy when a phenomenon is studied within its natural context and the focus is on understanding the dynamics presented in single settings (Eisenhardt, 1989). When using this approach, it seems clear that the context of the units of analysis is crucial and cannot be put aside in order to gather a full understanding of the situation. As previously mentioned, in the belief that the financial industry might be idiosyncratic

enough to produce specific results, it was considered that a proper understanding of the industry is needed. Moreover, a consumer's acquisition of financial products is usually a very conscious decision and the choice of one or other provider is made on a personal judgement, amongst others (Foxall and Pallister, 1998; Beckett, 2000). This suggests that the companies each have a "personality" based on their culture, processes and activities, usually collated under a brand image. If this is the case, a clear investigation of companies and their circumstances is crucial to complete the picture and contextualise the research.

Despite the strengths of case studies, this technique is not free from limitations. There are three main criticisms. Blaikie (2003) starts with the possibility of presenting "sloppy research and biased findings". This possible argument can be overcome by conducting quantitative research, which can be replicated in different settings the results of which can be measured and controlled.

In addition to this, some researchers have suggested that case studies are not suitable for generalisation. This is because of two main reasons (Blaikie, 2003): Firstly, it is quite challenging to establish general patterns from a single unit of analysis; and, secondly, due to the specific characteristics of each unit of analysis, comparison and replication are not always possible.

Finally, Yin (1989) argues a practical concern of case studies. He clearly states that this research technique takes too long to gather enough depth, but sometimes, it can be too deep to allow proper management of the information.

### **3.7 Data Collection**

Case studies typically combine several data collection methods and the evidence found can be both qualitative and quantitative (Eisenhardt, 2001). The data collection process used was quite extensive, employing the following stages:



### 3.7.1 Approaching Main Case Study Respondents

First, several companies were contacted by email, which offered them a research collaboration proposal. The process started in January, 2005. On the first run, three UK mutual firms and three Spanish institutions were approached. The selection criteria were based on several parameters:

- companies needed to operate only in one country (Spain or UK) in order to simplify the segmentation process to avoid concerns about cultural differences in the consumption of financial services;
- companies needed to be of medium size in order to make sure that the data provided was manageable
- companies needed to be specialised in financial services only, with a wide range of products offered. The request of focusing only on financial services responded to the need to avoid analysing consumption patterns across different industries. Finally, a relatively wide range of products was requested to allow identify specific relationships between products and also purchases.

The email was followed up a week later, where more details and an explanation about the project was provided. This process of contacting companies was broken down into several waves, with a maximum of six firms in each country making the process manageable. Due to the complexity of the analysis and the anticipated length of the project, the number of participants was limited to six per wave and only then, after having a response from those already contacted. Moreover, in order to avoid rejecting companies that could be interested in taking part in the research, a series of emails were not sent until after having received the responses from a previous wave. From the first wave, Company B<sup>8</sup> (a UK building society) agreed to arrange a meeting to discuss the conditions of the project. After several meetings, where details of the research were explained, the data and information requested (amount, time, format) were discussed. At the end of April, 2005, the confidentiality agreement was signed and the company started extracting data in the format requested. However, there was still another participant to find in order to provide a second case study. In

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<sup>8</sup> For confidentiality reasons, Company B requested that its name was kept anonymous. As a result, any reference to it (documentation, web site and respondents) will be done using 'Company B' across the whole project.

February, 2005 (wave 2), another series of emails to a further six companies were sent and, again, these were followed up by telephone, contacting the General Managers or Marketing Directors of companies. From mid-March, 2005, two Spanish firms were interested: a mutual insurance company and a large bank, with mutual characteristics. After several conversations with their Marketing and Research Directors, the insurance provider (Company A<sup>9</sup>) was the first to agree the conditions in May, 2005 and, finally, the bank was contacted in order to withdraw the research proposal. After that, further contact with other companies was suspended.

The terms of the research agreed that each company provided their complete customer and transactional databases, until March, 2005, together with information about their company in the form of several meetings and documents, illustrating their strategies and situations. In return, the researcher agreed to prepare a detailed business report at the end of the study, which described the retention strategies identified and made some strategic recommendations which, eventually, would be presented to the General Boards.

### 3.7.2: Collecting Data on Competitors and National Financial Bodies

According to the hybrid research strategy positions previously explained, this project was conducted using a ‘multiple method’ strategy. The qualitative approach was conducted combining interviews, annual reports and other industry documentation. These were utilised in order to contextualise the industry and validate customer retention and cross-selling for the industry in general and those organisations in particular. Due to the possible limited views of the respondents actively involved in the research (Company A and Company B), two extra sources of information were pursued: another two companies (Company C and Company D), direct competitors of the companies being analysed, were interviewed about the same issues.

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<sup>9</sup> For confidentiality reasons, Company A requested that its name was kept anonymous. As a result, any reference to it (documentation, web site and respondents) will be done using ‘Company A’ across the whole project.

- Company C arrived in Spain in 2001, with the mission of “making the world a safer, more secure place to live and work” (company’s website<sup>10</sup>). It is currently one of the biggest insurance and investment corporations in the world. Its expansion in Spain has been very fast, being based on the acquisition of three small insurance providers already operating in the country. At the end of 2007, Company C had 2,500 branches, 1,300 employees and a market share of 1.4%<sup>11</sup> of the Spanish industry ([www.icea.es](http://www.icea.es))

- Company D was established in the UK in 1869, to meet the aspirations of prospective home-owners in and around the country by building houses. At the end of 2005, it had 38 agencies and 34 branches with a total assets value of £2.3bn (Company D’s website).

The two firms provided an alternative view of the industry, its current situation and the challenges that they faced.

To add to this insight, two national industry bodies (independent from any political power, in both cases) were approached regarding the research questions and the objectives of this thesis.

- The Building Society Association (BSA) “is the trade association for all of the UK's building societies” ([www.bsa.org.uk](http://www.bsa.org.uk)), with a membership base of over 60 UK building societies, whose collective assets total over £305 billion (2007). This organisation was founded in 1869 in London with three main objectives:

- acting as a representative body for all its associates;
- conducting research to distribute to all building societies; and
- being a consultative body for all its members.

- ICEA (Instituto de Cooperación de Empresas Aseguradoras) the institute of co-operative research for insurance and pension companies), is an association with the objective of researching and investing into issues regarding the insurance industry. It

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<sup>10</sup> It was requested by Company C and Company D to keep their names confidential including any possible references to its web site.

<sup>11</sup> The largest market share at the end of 2007 was about 4.7%.

was founded in Madrid on 1<sup>st</sup> February 1963. It is composed of a large number of firms, which collectively represent 92% of all the premiums of the Spanish insurance industry, together with several international firms from Europe and America. At the moment it oversees three main functions:

- Industry research;
- Training and education for all members of the association;
- Consulting ([www.icea.es](http://www.icea.es)).

These two national bodies helped provide a broader picture of the industry due to the magnitude of information that they deal with. Moreover, their independent position gives them a good understanding of the industry, avoiding the natural bias inherent within the companies involved in the market, where size, region and other cultural aspects may shape their perceptions.

In addition to these personal interviews, all the companies and national bodies provided documentation and reports summarising the features and characteristics of the industry. Although this material has not been presented here, its richness, covering several aspects of the industry, has been very valuable in order to give a deeper understanding of the conditions and peculiarities of the UK and Spanish financial industries.

The combination of the interviews and the material provided by the participants achieved two main objectives. Firstly, they allowed both case studies to be contextualised by revealing their characteristics and the markets in which they operate. This contextualisation is crucial due to the relevance of recognising the social realities of the units of study for the case studies. Secondly, research questions 1 and 2 were addressed by asking the participants specific questions on the use of relationship marketing, its value in the industry and their opinion on the cross-selling strategy with retention as an objective.

### 3.7.3 Interviews:

Kvale (1983) defined the interview as perhaps the most powerful means for attaining an in-depth understanding of a respondent's experience. Thus, the aim is for the

researcher to gather data/information by holding a meaningful conversation with the interviewee. Therefore, the objective is to gather data/information from the interviewee (Kvale, 1996). The interview, unlike most other techniques, requires serious interpersonal skills, such as, putting the respondent at ease, asking questions in an interested manner, noting down the responses without affecting the natural conversational flow and support without introducing bias (Oppenheim, 1996). The underpinning objective of interviewing is to find out what is in a person's mind (Patton, 1990). Rubin and Rubin (1995), define the interview as a qualitative way of uncovering and exploring the meanings which underpin people's lives, routines, behaviours, feelings, etc. There are essentially two types of interviews (Blaikie, 2003):

- a) Exploratory interviews: in depth interviews or free style (including group interviews);
- b) Standardised interviews: such as those used in public polls, market research and Government surveys, conducted by a person, but following a detailed questionnaire.

Whatever the format, the goal of interviewing is to attain a first-person description of some specified area of experience (Thompson *et al.*, 1989). Skyes and Hoinville (1985) pointed out that, when interviewers are not face to face, respondents are less likely to feel threatened and therefore less bias might be introduced. However, the presence of the interviewer encourages respondents to feel relaxed. There are many ways in which interviewers can affect the validity of the responses (Lee, 1993). First are the social characteristics of the interviewers themselves, which may have a biasing effect on results. Further, the expectations which interviewers might have about the interview itself, might affect it. However, Wise (1987), argues that the success of interviews depends on being able to establish a complex interrelation between the interviewer and interviewee, which will allow a deeper disclosure of information and understanding of the circumstances of the respondents.

Taking all these concepts and recommendations into account, there were a total of three initial semi-structured interviews<sup>12</sup> with the respondents to get their overview of the concepts of customer retention and cross-selling. Those conversations provided the first proof, supporting the initial assumptions that cross-selling and customer retention were under consideration in the financial services industry. Following on from these interviews, the main focus of the research moved into the quantitative analysis and restricted interaction with both companies. This distance, “self-imposed” by the researcher, responds to the requirement of avoiding any external influence or bias on the quantitative results. However, once the data was analysed, subsequent sets of interviews were arranged to get a deep understanding of the industry, the relevance of customer retention and the popularity of cross-selling. At the end of the research, several interviews were conducted to discuss some of the results, which were particularly significant (i.e strong relationships, large volume of incidences). Some of these conversations had the objective of validating some of the findings in order to ensure their external validity.

Surprisingly, despite the results to be provided in the qualitative sections (chapter 4 and 6), where Companies A and B state that customer retention is crucial for their survival and all benefits discussed by the literature from the use of cross-selling as one vehicle to promote customer retention, neither has consciously implemented any of them. Any activities related to managing the relationships with customers respond to the need to increase sales or hit targets. Moreover, their current strategies do not include any specific customer retention program or objectives which could be developed through cross-selling or other retention approaches. This suggests that while the concepts are easy to understand and attractive for the management team, in reality, their implementation does not seem so simple. When companies were asked about the key barriers to implement customer retention and to adopt cross-selling, the responses focus around three main reasons:

- Culture: the need of moving from a sales/cost-benefit orientated company towards a more customer centric approach where profitability derives from fully understanding customers and delivering the service accordingly.

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<sup>12</sup> A more detailed description of the interviews (respondents and dates) will be provided in Chapter 4 and Chapter 6

- Skills-set: developing customer successful customer retention programs seem to require a set of capabilities which combine (1) customer focus, (2) servicing knowledge, (3) strategic thinking and (4) data analysis. The concentration of those skills in the staff appears to be a rare mix.
- Cost: in order to make a proper use of the available information, companies perceive the need to invest large amounts on money in systems and technologies, which have tended to have low returns because of the previous two factors.

In conclusion, financial services providers have embraced the concepts of customer retention as a top priority and have acknowledged the benefits of maximising customers' share of wallet. However, the implementation of those concepts into their strategies has not been so straightforward given the barriers mentioned above and also the legacy of a comfortable and protectionist environment where sales were almost guaranteed. Realising this was extremely useful when approaching the definition of the content of the interviewing sessions.

Interviews with respondents followed the semi-structured format, with a prepared set of questions to guide the conversations. The main areas of the conversation fit within the following sections (Table 3.3):

Table 3.3: Semi-structured interviews format

<b>Industry Questions</b>
How would you describe the current industry in which you operate?
What have been the major drivers of change over the last two decades?
What are the key priorities for your organisation for the next five years?
<b>Customer Retention Questions</b>
How would you value customer retention in your industry?
Is it a high priority? Why?
How is your company working to promote customer retention?
<b>Cross-selling</b>
How would you value cross-selling in your industry?
Is cross-selling a high priority? Why?
Is cross-selling linked to the customer retention strategies?
What are the main barriers for cross-selling to be implemented?
What is your company doing around cross-selling?

#### 3.7.4 Quantitative data

The other purpose of the research, the validation of the analytical framework to discover cross-selling and up-selling strategies, adopted a completely different approach. This part of the research falls within the qualitative approach which suggested the use of the inductive strategy. Within this research strategy, the key issue is getting observations (data) without the bias of the researcher. Therefore, Company A and Company B were requested to provide their entire customer and transactional databases from their systems. This process was carried out entirely by the IT Managers who received a list of the variables (i.e. age, marital status, products, etc.), which should be included. Those variables were agreed after the initial discussion with both companies and once they have agreed to take part into the research. They were defined by taking into account the information which each company collected from their customers and what would be ideal to achieve the objectives of the project. The list of requirements was used to ensure the delivery of two sets of data with similar variables, which could then be analysed using the same



methodology and techniques. Due to the fact that both companies operate in different markets, offer different products and follow specific business models, some of the variables requested were not available (e.g. Company B did not record “customer profitability”). Around 95% of the variables requested were common to both data sets. The definition of the variables to include was a compromising exercise between the research objectives and the available information in both organisations. From a research perspective, the data requested covered the following areas:

- Customer socio-demographic data (age, gender, marital status, location, profession);
- Consumption data: number of products, date of purchases, products acquired by purchase, channels used by purchase, with a maximum of five products<sup>13</sup>.
- Profitability data: value of the customer, value of the premiums.

Since most (95%) of the desired variables were already recorded in each transaction by both companies, this made the possibility of comparing the results somehow easier. However, the main concerns came from two areas. On one hand, profitability was analysed by Company A (though using a very naïve definition of value) but, on the other hand, Company B had no measure of customer profitability. Secondly, companies were 90% confident of the validity<sup>14</sup> of their data, in terms of up-dating, lack of duplication and other errors. Despite this confidence, some duplication and other mistakes were found during the analytical stage. Those entries where discrepancies were found were removed.

### **3.8 Analytical Framework:**

The quantitative approach used in this study proposes an analytical framework that combines several techniques, in order to help companies discover effective cross-

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<sup>13</sup> The decision of five products as a maximum was made on the basis that some of the products analysed had long maturity (mortgages), and that the average number of financial product bought from the same provider is 2.6 for the insurance industry and about 2 for the banking industry.

<sup>14</sup> The validity of the data was done by cross-referencing some of the variables, random sample checks and descriptive analysis.

selling and up-selling strategies, which increase customer retention ratios. This approach can be broken down into three consecutive stages. The following figures (3.2 and 3.3) summarise the proposed method and the techniques used under the “Who-What-When” framework, to test if cross-selling opportunities depend on customer characteristics, consumption patterns and timing.

Figure 3.2 : Analytical Sequence



Figure 3.3: Summary of the “Who-What-When” framework: Stages, Objectives and Techniques

Stage	Objective	Techniques
<b>Who?</b>		
Segmentation	Identify Homogeneous Groups of Clients	Cluster Analysis
<b>What?</b>		
Pattern Analysis	Purchase Trees Predict Product Consumption	Markov Chain Logistic Regression
<b>When?</b>		
Purchase Sequence	Model Purchase Timing	Survival Curves Cox Regression

### 3.8.1 Segmentation:

This stage is aimed at understanding customers, who they are, and how they consume the products within the organisations under analysis. This knowledge will be obtained by classifying customers, based on certain discriminatory rules. These rules are neither true nor false, but their validity should be judged on the usefulness of the results. A classification scheme may present a convenient method for organising a large set of data and allowing the retrieval of information to be made more efficient (Everit, 1993).

For the purpose of this study, *post-hoc* descriptive methods of segmentation are used with the aim of identifying customer groups which are homogeneous along a set of measured characteristics (Wedel and Kamakura, 1998). Included in these characteristics are socio-demographic and purchase behaviour variables, which are used in this study to identify not only the “personal” profile of the groups, but also the main features of their consumption patterns.

Clustering methods are designed to create homogeneous groups. Most of the clustering techniques can be subsumed under four principal goals (Aldenderfer and Blashfield, 1984):

1. development of a typology or classification;
2. investigation of useful conceptual schemes for grouping entities;
3. hypothesis generation through data exploration; and
4. hypothesis testing, or the attempt to determine if types defined through other procedures are, in fact, present in a data set.

Within the clustering techniques, this research has opted for Non-hierarchical, or K-means, methods also called Iterative Partitioning. These consist of deciding on an initial number (k) of groups and computing the central points (centroids) of the groups (Pollard, 1981; Anderberg, 1973; Hartigan, 1975). The second stage allocates each data point to the cluster that has the nearest centroid by using some distance measurement. Finally, the new centroids of the clusters are calculated again, taking

into consideration the members allocated to them. This process can be repeated several times, altering the initial number of clusters to assess how the solution evolves by introducing or removing extra groups. The criterion used to allocate points into different clusters is the squared Euclidean distance, which is the square root of the sum of the squared differences in value for each point to the centroids (Punj and Stewart, 1983; Everitt *et al.*, 2001).

However, there are some concerns about the use of cluster analysis as a segmentation technique. First, this strategy seeks to discover a structure of the data that is not apparent at first, and in that process, its operationalisation will impose such a structure that might not be real (i.e. it might reach a cluster solution regardless of its usefulness). Second, most clustering techniques are relatively simple procedures that are not supported by an extensive body of statistical reasoning (Everitt *et al.*, 2001). Moreover, different clustering methods can generate different solutions to the same data set due to the fact that these techniques have evolved from many disciplines. Because of that, the validity and reliability of a cluster solution must be based on the purpose of the research (having several segments internally homogeneous and externally heterogeneous) and the context of the data (financial products consumption). In this research, the internal validity has been tested: (1) using individual statistical tests suggesting the level of confidence of the solutions proposed; and (2) replicating the same process on three sub-samples (test, control and validity), for which similar solutions were obtained. Regarding the external validity, the final sets of interviews conducted with the companies were aimed to test whether solutions made sense in real life circumstances, as judged by real experts.

Everitt (1979) states that determining the number of clusters is the fundamental step which still remains one of the unsolved cluster analysis problems. This difficulty is compounded because the definition of a cluster<sup>15</sup> is ambiguous. Wallace and Boulton (1968) described it as a sub-set of entities, which may be usefully treated as the equivalent of some purpose. The question is whether that grouping truly represents an existing relationship within the data, or if it is imposed into it. In order to

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<sup>15</sup> Set of entities which are alike.

overcome the problem of selecting the “correct” number of clusters and assuming that this exists, several criteria have been used in this study. First, the  $R^2$  based on Beale’s F statistic is used (1964) by selecting the solution with highest  $R^2$  as it measures the variance explained by the clustering solution. In addition to this, SAS Enterprise Miner® calculates the value of the Cubic Clustering Criterion which minimises Ward’s variance Method (SAS Technical Report, 1983). The way that these two have been used was by observing the variation experienced, by increasing and decreasing one cluster in each final solution. In addition to this, the SAS® application also displays the discriminatory power of the rules selected to classify customers (from 0 to 1). In that way, variables with a low capacity in a group could be removed, leaving only the most significant ones. Finally, the membership size was also taken into account, so as to have not only representative groups, but also groups big enough to justify an independent analysis.

During the pilot study (Appendix 2), the K-means Clustering Technique was validated with the use of the Discriminant Analysis. It is a statistical technique which assesses differentiation between classes, categories or groups. This classification assumes a linear relationship between the variables under analysis ( Lévy & Mallou, 2003). The dependent variable used was the Member Classification Variable obtained from the cluster analysis. The independent covariates were the socio-demographic and transactional information recorded. Due to the linearity assumptions underpinning this technique, its suitability is questionable. However, SAS Enterprise Miner® displayed enough information about the validity of the cluster solution to allow the removal of weaker validation methods, as Discriminant analysis has proved to be.

### 3.8.2 Acquisition pattern:

The objective of this analysis focuses on identifying the consumption path of customers. In order to do so, each of the clusters identified from the previous stage were analysed individually. This approach relied on the belief that different groups of customers (segments) have different needs and therefore their consumption will differ from other clusters (Lévy & Mallou, 2003). Moreover, the aim was not only

about describing the evolution of purchase behaviour, but also to try and understand the relationships between products, by identifying the interconnections or combinations of products that are more likely to occur. Finally, this analysis has attempted to model repurchase taking two different approaches: a static approach (without the influence of time); and a dynamic approach (taking into account the lapse of time between purchases).

Firstly, Purchase Trees were established to provide a graphical display of the evolution of financial products consumption. Using the shape of a tree, it locates the most acquired product (in an ellipse) on the trunk of the tree, together with the probability of acquiring such products for that cluster. From that point forward, consecutive purchases are displayed as branches representing the most acquired products (in boxes), and their probability of being consumed after other product categories (cross-selling). Finally, in order to measure the up-selling probability, recursive arrows have been added to each box.

Although this technique is quite simple as it uses only probability figures, it provides a holistic view of the consumption evolution (up to five products observed) at a glance. Also, the inclusion of probabilities indicates the possible product connections found in the data set.

The second technique used was the Markov Chain Process. Mathematical models can be deterministic or stochastic. If the effect of any change in the system can be predicted with certainty, the system is said to be deterministic. However, this is not the case in much of the research in social sciences and certainly, it is not the case in this research. Predicting the consumption that customers are going to use during their life, does not fall into the first category. Within the stochastic models, Markov Chain Processes are among the best known (Bartholomew, 1973). They are a type of process in which the transition between two situations (purchase product type X on the first purchase and purchase of the same product on the second purchase), depends on the position (product acquired on the first purchase) in the current situation. Basically this means that current behaviour determines future behaviour. The second

condition of these processes is that the transition between situations (second, third, fourth purchases, and so on) remains constant (Putterman, 1990). It states that the probability of acquiring product X (based on what was acquired in the previous purchase) remains constant over time.

The first assumption seems to fit nicely with the objective and context of this study. Accordingly, future consumption would be based on previous consumption; therefore there was a dependency relationship between them. If that relationship exists, it could be expressed using mathematical expressions and could therefore be measured. This would support all the quantitative approaches employed in this research. However, the second assumption did not seem so appropriate in this context. If, as it has been stated by the Consumption Life Cycle theory, customer needs evolve depending on their situation and age, it was not unreasonable to assume that financial needs would not be the same for young or mature customers. Therefore, the probability of acquiring certain products, which was strongly linked to life stage needs such as mortgage, or pension plans, should change<sup>16</sup>.

The next two techniques used are aimed at modelling the repurchase decision of each cluster using, as covariates, the socio-demographic data and some of the transactional data. The first technique, Logistic Binary Regression, takes a snapshot of the repurchase decision. The second, Cox Regression from the Survival Analysis family, introduces a dynamic component, by taking into account the lapse of time between purchases (Harrell, 2001).

Logistic Binary Regression is a variation of the General Regression Model suitable for cases where the dependent variable is dichotomous (0 = no repurchase, 1 = repurchase) and the two possible outcomes mutually exclusive and exhaustive (Aldrich & Nelson, 1985). As the dependent variable is not continuous, the assumed relationship is no longer linear. Therefore the logit transformation (taking a natural logarithm) is applied to have a linear model that can be estimated by using the Least

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<sup>16</sup> A more detailed explanation of this technique will be included in the analysis section, where its hypothesis and outputs will be explained.

Squares Technique (Freund and Wilson, 1998). Usually the model is written as equation 3.1:

$$P(\text{Repurchase}) = 1 / ( 1 + e^{-(\alpha + \beta_1 x_1 + \dots + \beta_k x_k)} )^{17} \quad (\text{Equation 3.1})$$

Applying logit transformation to both sides of the equation gives its log-linear form:

$$\text{Logit}(P) = \ln\left[\frac{P}{1-P}\right] = \alpha + \beta_1 x_1 + \dots + \beta_k x_k$$

The method used to introduce and evaluate the validity of the variables in the model have been the Stepwise multiple regression. Menard (1995) defined it as a method to be used in the exploratory phase of research or for purpose of pure prediction, not theory testing. In stage one, the independent best correlated variable with the dependent one is included in the equation. In the second strategy, the remaining independent variable with the highest partial correlation with the dependent, controlled by the variable included in the model from step one, is entered. This process is repeated until the addition of a remaining independent does not increase the goodness of fit of the model by a significant amount (or until all variables are entered).

The analysis of the dynamic repurchase could have been approached in different ways, for example: (1) a hierarchical process (using Guttman-scalogram analysis and latent-trait analysis); and (2) a succession of purchases (using Markov Models); or a sequence which focuses on the time aspect (survival analysis) (Prinzie, 2003). The databases provided by both companies held information about the different policies purchased, together with the date of purchase of the first five products; hence, the time between purchases could be obtained; therefore survival analysis could be employed.

An appropriate approach to achieve these aims is Survival Analysis (Klein and Moeschberger, 2003). This is a class of statistical methods used for studying the

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<sup>17</sup> where  $P$  is the probability of an event (repurchase) to be estimated,  $\alpha$  is the constant of the equation and  $\beta$  is the coefficient of the  $k^{\text{th}}$  predictor variable  $x$ .



occurrence and timing of specific events (Hosmer and Lemeshow, 1999). Principally, its objective is to explore when the next event (the purchase of a determined policy) will occur. To apply this technique, it was necessary to know not only who actually bought a specific product for the next purchase, but also when this event happened. Thus, there were two new types of variables were introduced into the data set. The first related to the amount of time (measured in days) that passed between purchase (t) and purchase (t + 1). The second is called the “censor” variable, which is a dichotomous variable taking the value 1 if the event occurred and the value 0 if it did not. Censoring occurs when a person has not yet purchased another product by the end of the observation period.

The survival analysis considered in this analysis was based on Cox Proportional Hazards Regression (Cox, 1972). The model (equation 3.2) is usually written as:

$$h(t) = \lambda_0(t) \exp\{\beta_1 x_1 + \dots + \beta_k x_k\}^{18} \quad (\text{Equation 3.2})$$

This model can also be expressed as Relative Hazard (Hazard Ratio):

$$h(t) / \lambda_0(t) = \exp\{\beta_1 x_1 + \dots + \beta_k x_k\},$$

and Log-Relative Hazard or Log of Hazard Ratio (LHR):

$$\ln(h(t) / \lambda_0(t)) = \beta_1 x_1 + \dots + \beta_k x_k.$$

Logistic regression has been applied to numerous investigations to examine the relationship between several factors and a binary outcome. However, the ability to consider the time element of event occurrences by proportional hazards models has meant that logistic regression has played a less important role and instead, survival analysis has been used (Abbott, 2005). Both techniques are aimed at measuring the probability of the outcome defined in the binary dependent variable (i.e. repurchase or not repurchase). Apart from the algorithms and the formulation of the equations, the key difference is that Cox Regression, as other survival analysis techniques, takes into consideration the effect of time when calculating that probability of occurrence (Fox, 2002). In the “Who-What-When” framework, time has a very significant role

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<sup>18</sup> where h (t) is the hazard function (or hazard rate) at time t,  $\lambda_0(t)$  is the baseline hazard function or hazard when the values of all the predictor variables equal zero.

to play, because of it, Cox Regression was included into the model to add this dimension. Moreover, the aim of the framework is to offer an approach to be used when defining customer retention strategies based on cross-selling, therefore including several techniques to explain the repurchase decision can only bring benefits to the results. As it will be highlighted later on in the results and analysis sections, the results from both techniques will be fairly consistent across all segments, however, the outcome from the Cox Regressions will add the dynamic component and uncover how time also has an impact on repurchase.

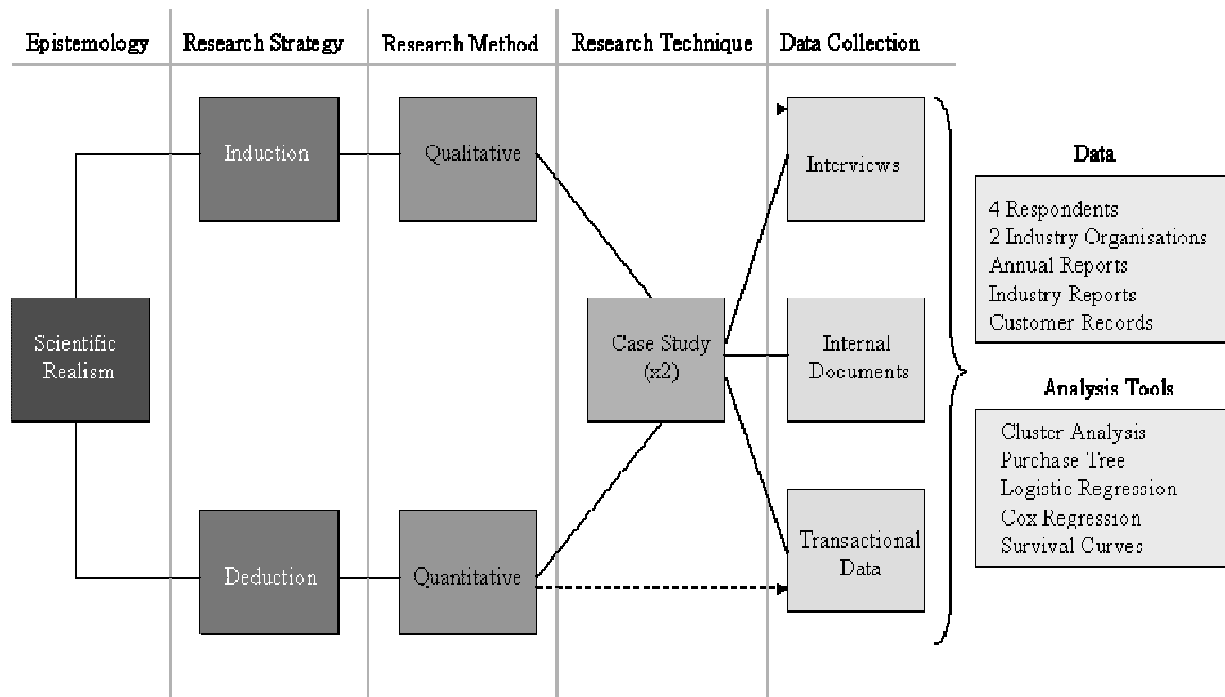
### 3.8.3 Time Sequence Analysis

To achieve the goal of retaining customers and enhancing them in a productive relationship, the company should understand and predict when a customer is likely to make another purchase. Once the company knows which product has the highest probability of being acquired next by each segment, determining when this purchase is likely to take place facilitates the strategies of the sales force, as they can predict the product that the customer needs and how to make the best possible offer. The outcome of the analysis was to provide the survival curve which describes the probability that an individual will not have purchased a product by a given time. This timing analysis has been carried out for each cluster. As a result, a few specific recommendations will be made to help the managers of the company to understand when the right moment to offer another policy is, or to up-grade the existing one, matching the requirements of each cluster of customers.

### **Conclusion:**

As previously stated, one of the motivations for conducting this research is the fact that cross-selling has not received much attention from scholars. Furthermore, the limited research in the area has focused on products rather than on services, or more specifically, on financial services. All this has orientated the scope of this project towards designing a framework to deploy cross-selling strategies in the financial services industry. This chapter has presented the main structure of the research design developed to fulfil that objective. Figure 3.4 summarises it.

Figure 3.4: Research Design Overview



From an epistemological perspective, scientific realism has been adopted because it combines the scientific method with the need to take into account the social context and reality during the investigation. Because this thesis aims at two distinctive objectives, the research strategy has followed a hybrid approach by using both deduction and induction. The qualitative strategy has been used to approach research questions one and two, both concerned with assessing the value of customer retention and cross-selling in the financial services industry. These have been addressed by conducting semi-structured face-to-face interviews with six organisations. At the same time, the quantitative approach was used to validate an analytical framework to discover cross-selling and up-selling strategies (Who-What-When). This was conducted by addressing Research Question Three on the basis that these strategies vary according to: who buys, what is bought and when it is bought. Regarding the research technique, the case study was selected as a means for providing a deeper understanding of the respondents and their specific realities and context, which are crucial to assess the validity of cross-selling and retention on their strategic decisions. Moreover, the “personality” of companies has a strong effect on how and

why customers acquire products from them; therefore, it can influence the transactional data and its results.

In order to gather data for the case studies, several data collection techniques and sources were used, combining interviews, documents from the companies and transactional databases and their analysis. The combination of methods, strategies and techniques of the hybrid approach can be considered complicated. Notwithstanding, this combination overcomes the disadvantages of using only one strategy, method or technique, making, as a consequence, the thesis and its results more robust.

The following section starts with the first case study, Case Study A. The first part of this case study focuses on the qualitative research aimed at assessing the value that customer retention and cross-selling have within the Spanish insurance services industry. In doing so, a brief description of the industry and the company will be provided prior to focusing on the qualitative results.

**Chapter four**

**Case Study One- Company A:**

**Customer Retention &**

**Cross-selling in the Spanish**

**Insurance Industry. Qualitative**

**Research**

## Introduction

As described in the previous chapter, this chapter addresses the qualitative approach by introducing the first case study used (Company A) and by attempting to answer the research questions one and two, which will lead to address research question three and to develop the cross-selling and up-selling framework (Who-What-When). This case study is based on a mutual insurance company from Spain with over half a million customers offering five product categories: car insurance, home insurance, risk insurance, pensions/saving plans and health insurance. Over a period of two years, over ten interviews were conducted with people from the marketing, IT and market research departments. During those interviews, research question one (customer retention) and research question two (cross-selling) were covered according to the questions described previously. The interviews conducted during the qualitative stage of this project have been summarised in table 4.1.

Table 4.1: List of respondents, Case Study One

Case Study One: Spanish Insurance Industry	
Company A:	
	Date
Marketing Director	May 2005, June 2005, October 2005, November 2005, May 2006
Market Research Manager	April 2005, September 2005, November 2005, December 2005, July 2006, September 2006
IT Manager	September 2005
ICEA:	
	Date
Research Director	December 2006
Research Studies Manager	November 2006, December 2006
Marketing Manager	November 2006, December 2006
Company C:	
	Date
Marketing Director	May 2005, June 2006

The beginning of this chapter explains the conditions of the current Spanish insurance service industry. These conditions have a clear impact on the competitive conditions of the market and the strategies followed by its players. After evaluating the main features of the industry, it describes the main features of Company A, which help to understand its strategy and position towards customer retention and cross-selling. Section two addresses the relevance of Customer Retention as part of the Relationship Marketing and CRM concepts (research question one). This assessment has been obtained from views gathered through a number of interviews with several firms (Company A and Company C as key players in the industry and ICEA acting as the insurance national body). The third section consists of evaluating the concepts of cross-selling as a possible strategy which Spanish insurance providers should consider for their future survival in the market (research question two).

#### **4.1 Spanish Financial Services Industry**

The financial services industry in Spain has been subject to dramatic changes over the past two decades as a result of the advancement of information technology, deregulation and globalisation. This has reduced margins in traditional financial activities, leading companies to merge with others, both at home or abroad or to concentrate on specific markets (Gastón Gelos and Roldós, 2002).

As part of this, the Spanish insurance market has changed significantly over the past twenty years, following the deregulation of banking, insurance, and other financial services in major industrialised nations (Barth et al., 2000). The principal objective of this deregulation process is to improve market efficiency and enhance customer choice through increased competition. In particular, the Spanish insurance industry has been affected by the European Union's Third Generation Insurance Directives, implemented in July, 1994 (Cummings and Rubio-Misas, 2006). The first deregulation in the industry started in the 1980s, when the Government began tightening solvency standards and encouraged mergers and acquisitions in the insurance industry (Greene, 2002). This was aimed at creating insurers who would be financially stronger, more efficient, and more competitive both nationally and

internationally. As a result, the number of insurers declined by about 25% from 1980 to 1990, as many firms exited the industry either through mergers and acquisitions or insolvency (Esteban- Jodar, 1986, 1993). In addition to this, the number of mutual firms declined by almost 50% between 1980 and 1992. As competition intensified in the 1990s, due in part to the entry of foreign insurances and banks into the insurance market, the number of insurers continued to decline, although the number which demutualised fell dramatically (Figueredo-Almaça, 1999). Between 1989 and 1998, the number of Spanish insurers declined by 35% and average firm sizes increased by 275% (Dirección General de Seguros, 1999).

In spite of the dramatic restructuring during the 1980s and 1990s, the Spanish insurance industry remained divided between large national players and small regional niche players specialising in narrow product categories or geographical areas. In addition to these strategies, regional companies have manifested a clear social character by undertaking charitable-social prospects on their regional areas of activity (De la Cuesta Gonzalez and García-Verdugo Sales, 2001). The evolution of the smaller firms was quite dissimilar; whilst some of them have adapted well to their market segments and are expected to remain in the market, others were clearly inefficient and their prospects for long-term survival were not good (Cummings and Rubio-Misas, 2004; 2006). Finally, intermediate sized insurers, trying to compete in the national market, were vulnerable to competition from market leaders.

In addition to local regulations and competitive conditions, the Spanish insurance industry is also affected by more general European developments (Swiss Re, 1996; 2000). For example, the implementation of the EU's Third Generation Directives represented a major step in creating conditions in the EU resembling those in a single de-regulated national market. As a consequence, insurers were allowed to engage in true price competition in personal lines for the first time and also to compete more freely in products and services. The Directives (70's; 80's and 90's) also encouraged the entry of foreign firms and banks into the Spanish insurance industry, making it more difficult for small and sometimes inefficient firms to survive.



From a demographic point of view, Spain has a very low birth rate, coupled with a relatively high life expectancy and a delay in the emancipation age ([www.ine.es](http://www.ine.es)<sup>19</sup>). Those factors which make replacement of generations difficult and the continuous growth of working women are changing the household and consumption roles (Instituto Nacional de Consumo, 2005). These circumstances have a clear impact on all the industries as well as the insurance industry. For example, the ageing process of the Spanish population has introduced some doubts about the viability of the public pension system. The reasons for this ageing process are the result of three main factors:

- Increased age expectancy, which is around 80 at the moment
- Reduced fertility in terms of lower numbers of children per household
- Reduced mortality since the beginning of the century. ( [www.ine.es](http://www.ine.es) )

Therefore, mature customers have started considering alternative options such as pensions and saving plans. Moreover, as customers are establishing their own households later, the purchase horizons for products like Home Insurance and Car Insurance are postponed. This shortens the length of time for customers to satisfy several financial necessities (home protection, pension plan, car insurance, health insurance), therefore increasing competition not only between companies, but also between products (Guardiola Lozano, A., 2001).

As consistent with other developed countries, markets are more mature with high competition and few loyal customers. In this scenario, it seems quite difficult for companies to increase customer loyalty and repurchase. The only way to overcome this difficult situation is by finding better business strategies, offering products which are genuinely valued by customers and giving customers a more complete value proposition.

#### 4.1.1 Overview of the Spanish Insurance Industry

Specifically for the insurance industry, the acquisition of insurance products in Spain is higher than any other financial services and, into the future, it seems that this trend

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<sup>19</sup> National Institute of Statistics of Spain [www.ine.es](http://www.ine.es) visited on 05/12/2007

will remain constant (Mapfre, 2005). However, an increase in the acquisition of investment and pension plans to protect the retirement period of an aging population has been forecast by the Spanish National Institute of Consumption. In this respect, the Spanish consumer has a growing desire for security: the customer feels insecure in a global world, subject to market factors that he cannot control (Caballero Sánchez. 1997). In this scenario, insurance and pensions play a relevant role in satisfying those needs.

In this context, this is where the Spanish Insurance industry can be found. 2005 was a positive year in terms of growth and economic results, mainly as a result of the good evolution of the Spanish economy. The total volume of premiums reached the value of € 48,775 (millions). “The industry is clearly divided in two areas:

- Life Insurance: highly related to the growth of the mortgage industry linking the mortgage with life insurance. Around 80% of these products are acquired through the banking channel. Savings products are also included in this group. They have experienced a significant growth due to the “expected” deficit of the public pension system.

- Non life Insurance products: which include car, home and “multi-risk” products” (ICEA, December 2006). Within this category, “one of the main trends is the reduction of the market share experienced by traditional insurance providers due to the introduction of innovative entrants into the market like Direct Line. As a result of this situation, traditional providers have been either closing down their own branches or cancelling their agreements with intermediaries to be more efficient”. (Marketing director Company C, June 2006). The following figures (5.1 and 5.2) illustrate the characteristics of the industry.

Figure 4.1: Spanish Insurance Industry

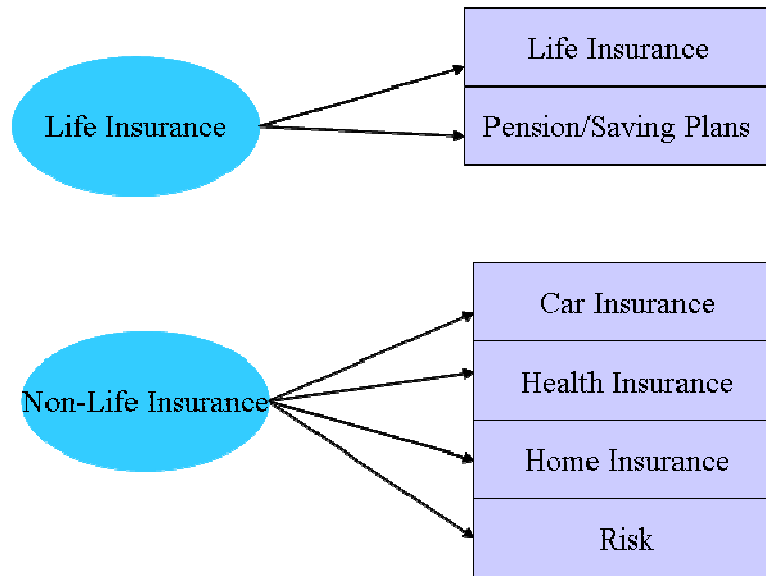
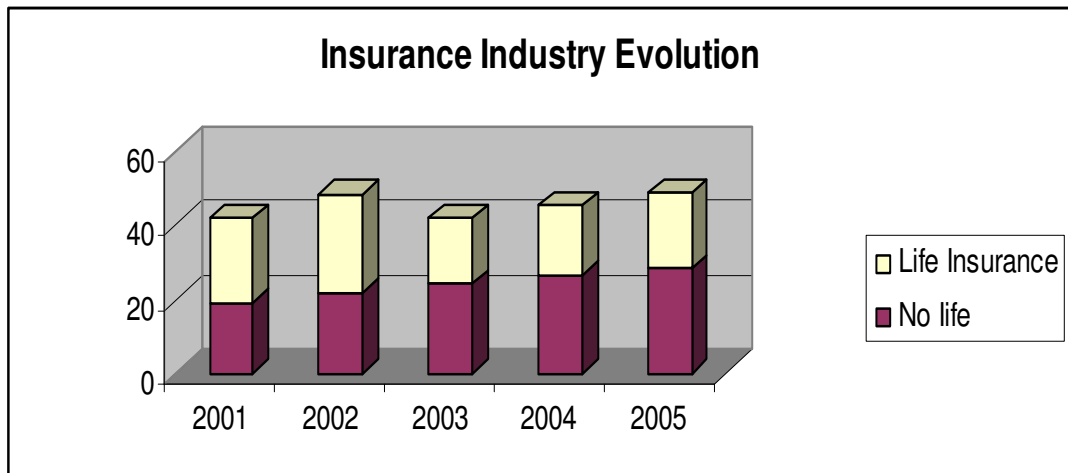


Figure 4.2: Spanish Insurance Industry Evolution (% of policies)



Source: Fundación MAPHRE, 2006

With respect to the Spanish car insurance current situation, the Marketing Director of Company A notes that “we are in the middle of a price war, but we still have positive results (profits) that probably will last for this year (2006/2007) and the next one. Probably at the end of 2007 we will start seeing some adjustments on the price of car insurance policies. In this situation, where everyone is targeting the profitable

customers from competitors, the CHURN<sup>20</sup> increases. Switching companies becomes more interesting for customers as they get better deals” (May, 2006). Therefore, companies should pay attention to retaining the best customers to avoid this promiscuous behaviour.

With regards to Home Insurance policies, the average premium is very low<sup>21</sup>, hence, “the saving that customers can get by switching insurance providers (10-15%) does not compensate the hassle attached. Moreover, it could be said that there is a certain apathy which protects companies from higher churn ratios. Customers sometimes do not change insurance provider because of all the time and bureaucratic issues associated with it. Moving your policy from one company to another means time, formalities, lots of documents...which, in the end it does not compensate when the premium difference is so slow” (Research Director, ICEA, December 2006).

As other policies (health, risk, savings) are more specialised, it is more difficult for customers to switch providers. Actually, “these types of policies are less standardised and more tailored to customers’ needs which tend to increase the satisfaction/retention ratios” (Market Research Manager, Company A, April 2005).

Finally in terms of Life Insurance Products, the position of the respondents is clear: it has to be differentiated between Savings and Risk/Life. The problem with Savings is that right now, as the interest rates are so low and as there has been a change in tax legislation (IRPF) in Spain, companies have not considered it as being a strategic product. The expectations are that this situation will change in the future. About Risk/Life Insurance, this is a so called “attached product”, as its acquisition is usually associated with the acquisition of a mortgage. The reason for this is that when a mortgage is negotiated, one way to ensure that it will be paid back, even in the case of death, is by contracting a Risk/life Insurance with the mortgage provider as the/one of the beneficiaries” (Marketing Director, Company A, June, 2005; Marketing Director, Company C, June, 2006, Research Director, ICEA, December, 2006). In this respect, it is quite normal that, together with the mortgage and the

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<sup>20</sup> Rate of customers leaving a company

<sup>21</sup> 180 €

Risk/Life policy, the bank or financial institution offers Home Insurance to its customers. In this way, two extra products are “recommended” to be acquired along with the mortgage. In summary, the growth of Non-life products is fairly moderate and mainly comes from car insurance policies. Life Products are on “stand by”, waiting for Savings to start reacting to the new legislation.

Another main feature that is complicating the situation for the insurance sector is the introduction of banks and credit corporations into the insurance industry, offering their own insurance products. The appeal of these companies comes from the fact that they have frequent contact with their customers and already seem to count on their trust to manage their money. Moreover, they used to have customers who had long-life products (mortgages, loans) and they also have an extensive network of retailers/branches which facilitate the contacts. All this makes banks a natural channel for insurance policies. Due to this, some insurance companies have started to amalgamate with banks to get the advantages exposed early, for example Mapfre and Caja Madrid (Market Research Manager Company A, July 2006). This supports the idea of an increasing competition with new channels<sup>22</sup>, which although at the moment are not very developed; they will have a deep impact in the future.

There is also an internationalisation of funds: savings are moving around from inside and outside the country. To support this with figures, at the end of 2005, around 50 international firms operated in the Spanish space, mainly coming from the UK, France and Germany (ICEA, 2006)<sup>23</sup>. The third feature refers to several mergers or concentration processes of big companies that have tried to increase their market share and their strength against international competitors. In line with this, the last few years have been characterised by a continuous concentration process that increased in 2005. At the end of 2005, the number of Spanish insurance companies in operation was 312, against the 330 registered at the end of 2004.

Furthermore, the insurance products consumer has been characterised by certain inertia, although it is slowly changing. As products become simpler and access to

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<sup>22</sup> Non-traditional insurance providers, the Internet and Telephony channel

<sup>23</sup> Evolución del Mercado Asegurador, Junio 2006 – Evolution of the Insurance Market, June 2006

information to compare between companies (mainly by using the Internet) becomes easier, clients become more proactive and the change of companies looks less scary (ICEA, December, 2006). “One of the strengths of the industry is the inertia of customers. Unless customers have had a very bad experience with the provider or gain a much better deal on the premiums, they do not tend to switch companies” (Marketing Director, Company C, May 2005). Due to the fact that Spanish insurance providers are very traditional, they respond slowly to innovation and changes. However, there are new entrants that are shaking up the market showing that social realities have changed. It could be said that insurance firms have, for a long time, relied upon past uses and ideas. Recently, it has changed with the introduction of new entrants (e.g. Direct Line, Genesis) and new operative systems (Liberty’s new working methods) which are shaking up the industry. As Davies (1996) stated, customers of financial services are gradually acquiring greater confidence in matters of personal finance. Therefore, that long established inertia may be a short life circumstance.

Furthermore, the Spanish Insurance Industry can be considered as “the younger brother of the bank industry, but with some delays. In the same way that the bank industry has evolved, after realising that they were stuck in the past, a similar pattern could be expected for the insurance industry in the future. Moreover, banks have started to offer insurance products applying the innovative systems and methods that they use in their normal business, are becoming a threat for insurance firms” (Marketing Manager, ICEA, November 2006).

Another strong point in favour of the insurance industry is the high purchase implication (people are buying protection for their future) which (in addition to the fact that some products (i.e. car insurance) are compulsory by law), makes the industry full of potential. To conclude, the industry is well developed, full of potential which has taken advantage of the inertia, and strong purchase implications shown by customers. The challenges for the industry relate to shifting the emphasis from policies to thinking in terms of customers and their needs: Looking at the value (presently and in the future) of the customer, more than at the premiums paid. Bond

and Stone (2004) stated how the insurance industry has been traditionally quite detached from customers and retention. However, they are reconsidering their position. In doing so, companies should not forget their business perspective, but they have to compete with what customers want and how they want it. “Sometimes, insurance providers can forget that they are offering a service; it is not about producing a product, selling it and forgetting about it, but also about offering a perfect solution tailored to each customer” (Marketing Manager, ICEA, December, 2006). In other words, it seems that understanding customers’ needs could help insurance companies to provide the right product and protect them against aggressive actions from competitors. Right now “we are nowhere near understanding what/who our customers are, which makes it impossible to anticipate their needs in the future. It could be said that we go blind when making decisions. In order to avoid this situation, companies should allocate resources to carry out qualitative and quantitative research which will give a complete picture of the needs and behaviours associated to the insurance products consumption” (Marketing Director, Company A, October, 2005).

However, the industry still has some growth opportunities. These might not come from traditional insurance products<sup>24</sup> and there is still room to offer other types of policies: such as health and life and to re-design car and home insurances. There are also some products that, in Europe, are already on the market, which could be developed to complete the portfolio, like personal insurance products and more tailored ones (Marketing Director Company C, April 2005).

To summarise, over the next ten years the insurance industry can expect: (1) more concentration processes to benefit from size synergies; (2) criteria unification between agents and insurance companies to share information and offer better products; (3) to improve customer service; (4) to reinforce companies’ brand image to differentiate between providers more easily; (5) to increase competition from new entrants and channels; (6) extra attention to satisfy customers; (7) to increase co-operation between insurance companies and other collateral companies, offering a

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<sup>24</sup> 99% of car owners and 90% of house owners are insured ([www.icea.es](http://www.icea.es))

better and more complete service to customers; and (8) more emphasis on the ideas of Relationship Marketing and CRM (ICEA, 2006). From all those trends, the last one has a deep impact for the purposes of this research as it recognises the relevance of the concepts of customer retention in the industry.

#### 4.1.2 Contextualisation of Company A

Company A is an insurance service provider which is part of the biggest Co-operativist (mutuality) Group from Spain. This group was created in the Basque Country in 1955 by a priest worried about the needs and future of the region which was going through difficult times after the Spanish Civil War (Company A's Official Website). What started over fifty years ago as a way of creating some options for the young population (focusing on education and manufacturing training) in the Basque Country, is now a large international organisation with 38 manufacturing plants and seven Corporative Delegations across the world, and 29 firms divided into three main divisions; the Financial Group, the Retailing Group and the Manufacturing Group, producing from house products, building, components, industrial equipment and other tools (Company A's 2005 Annual Report).

In 1959, Company A was born under the objective to overcome the social coverage problem faced by the members of the Co-operativist Group. The root of the problem was that the Spanish Government was not allowing the members of the Co-operative Organisation to be inscribed into the Seguridad Social<sup>25</sup> because they were considered as self-employed<sup>26</sup>. Therefore, they were not allowed to benefit from that regime. Over two decades, Company A managed to take over this social activity and in 1982, became a general insurance service provider. It has two divisions, Company A and Company A Life, the latter one being dedicated to offer life insurance policies. Both sections are part of the so called Financial Group which also includes a bank and a pension plan provider (Company A's "History of an experience, 2001).

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<sup>25</sup> Public Pension System in Spain

<sup>26</sup> On 30<sup>th</sup> July 1959, a Orden Ministerial (Government Act) expelled from the National Security System (Seguridad Social) all the mutual members, as it was understood that the System should only include those workers with a proper job contract.



As part of the Co-operativist Group, Company A shares the same basic principles. These principles are:

- 1) Free Adhesion: it states the equality of everyone independently from religion, gender, ethnic background, being the only requirements to join the Co-operativist Group the professional adequacy and the adoption of existing regulations.
- 2) Democratic organisation: all the members are equal under the rule “one person, one vote”.
- 3) Work sovereignty: work is considered as the principal agent transforming resources, society and human beings themselves.
- 4) Instrumental and subsidiary role of capital: the value of capital is accepted as being necessary for the organisational development. However, it will always be an instrument subordinated to work.
- 5) Participation in management activities: the democratic character of the Co-operativist Group requests the participation of all the mutualists into management activities.
- 6) Retribution solidarity: the economic retribution must be sufficient, similar to the retribution of other workers in the industry and according to the possibilities of the Co-operativist Group.
- 7) Inter-cooperation: it states the solidarity between the Co-operativist Group firms which is also a basic requirement for organisational efficiency.
- 8) Social transformation: the objective is contributing to the social transformation in search of a more supportive, free and fair society.
- 9) Universal character: following the principles of international mutualism, Co-operativist Group will work towards the objectives of Peace, Justice and Development.
- 10) Education: the achievement of those principles can only happen if education plays a paramount role, allocating human and economic resources to it.

Under this premise Company A is a well established company with a well known reputation in the Basque Country which makes it a leader with a market share around 11% of all the policies subscribed in 2005 in the area and the second company in terms of the value in euros of those policies (ICEA, July 2006). However, Company

A has recently started an expansion strategy across Spain which is showing its vulnerability as a regional firm. At the end of 2005, the total number of branches reached, was 249 in the Basque Country and 95 in the surrounding areas (Company A's Annual Report, 2005). For Company A, being small (around 400 employees) has advantages and disadvantages. "On the positive side, a local market makes it easy to have a good brand image, which, in this case, is even better because of the values (social, economical, and political, associated with the corporation) which are well-known and greatly shared by the population of the region. The downfall comes from the perspective of getting economies of scale against bigger companies, mainly, when we are trying to expand our business outside the Basque territory" (Market Research Manager, July 2006).

As the President of Company A mentioned recently in an interview, "Company A has faced substantial changes and in all of them we have been able to adapt to the new realities". Some of the reasons for that success come from the basic objectives shared by the organisation which mainly focuses on:

- Customer Satisfaction: which suggests customer loyalty, continuous improvement, effective communication (internal and external), differentiated products and services and customer care.
- Profitability: the access to higher profitability figures has to be the result of the efforts coming from people, quality, suppliers, investment, re-organisation, retribution systems and social provision.
- Internationalisation: the search for a better competitive position will depend on moving outside, reinforcing the mutualism image and the co-operation between the firms part of the Co-operativist Group.
- Development: the growth of the organisation will pay special attention to the competitive position, regional development, innovation, new products and services and education amongst others.
- Social Commitment: work is not only a way to obtain income, but it is also a source of satisfaction and personal growth. Therefore, the personal objectives have to be compatible with company objectives and social commitment. (Company A's CEO interview, 2007)

Company A has established within its strategic marketing plan (2005-2010) as one of the main objectives, the attention to customer needs to increase retention. The goal is keeping customers satisfied by giving them the right treatment (Company's A Marketing Plan 2005-2010). Actually, in that sense, Company A is leading in the customer satisfaction race with an average score of 8.41 out of 10 (Company A's Annual Report, March 2006).

#### **4.2 What is the role of customer retention in the industry?**

In order to corroborate the last trend identified in the research conducted by ICEA, this section will specifically address that question. It seems that customer retention is broadly used in the Spanish insurance industry, but with a short-run perspective. "Companies are not talking about customer loyalty or affiliation. If retention activities are not embedded into a loyalty plan, those actions might have an impact now, but will not ensure a strong impact in the future" (Research Director, ICEA, December 2006). "The current practice consists of customers receiving a letter from the insurance provider which tells them how important they are to the company. However, this communication is isolated and not supported by any other action or follow-up which really shows such interest" (Market Research Manager, Company A, December 2005). As a result, customers may end up confused, not understanding why suddenly they are contacted by the company or why, after being contacted, words are not put into action. Before getting involved in CRM/Loyalty/Retention specific activities, a strategic loyalty plan should be designed, along with the main objectives aimed at and the ways to deliver them (Foss and Stone, 2001). "When retention and loyalty plans are well designed and managed, then the results are awesome as customers feel identified with the company and there is no risk of losing them" (Marketing Director, Company C, May 2005). The main difficulty for the implementation of customer retention strategies is "neither technical, nor human (staff are ready and convinced about the value of retention and loyalty) but cultural. Companies are not yet ready to abandon their comfortable position by getting involved in understanding customers and taking the risk of becoming their advocates" (Research Director, ICEA, December 2006). Until this narrow and old fashion view has not changed, any effort spent on Relationship Marketing will be

wasted. Actually, there is no more than 5% of Spanish insurance providers effectively using some retention/loyalty strategy (Research Studies Manager, ICEA, November, 2006).

CRM and RM are seen as crucial for the future of the industry by participants of the research [“it is the right thing to do” (Market Research Manager, Company A, December 2006), “Customer retention will make sure that we will continue in the market tomorrow” (Marketing Director, Company C, May 2006). “It is assumed that retaining a customer is cheaper than acquiring a new one, but the reality is that the Insurance Industry still invests more (money, time and effort) on the new customer than on old ones. We still cannot talk about loyalty in the industry, but there is certain inertia and in the event of present problems/complaints customers tend to maintain their policies with the same provider, mainly to avoid the hassle of switching. However, we can say that customers today are becoming more diversified: they buy their policies from several providers. (Market Research Manager, Company A, September 2005). Therefore, it seems that companies are starting to face the need for becoming more focused on defending their customers.

Although the organisational culture and strategies have so far shown this change of mentality, their implementation has not been possible because of three factors:

a) Technology: “we counted on the tools which will make effective the analysis of the data generated in the organisation. However, the high cost of these solutions has made companies consider carefully their acquisition”. (Marketing Director, ICEA, November 2006)

b) Human Capital: “a change is needed in employees and all training and remuneration activities to ensure that staff efforts are aimed at rewarding customers, together with attracting new clients. It is in this area where the transformation is more complicated”. (Market Research Manager, November 2005)

c) Organisational Culture: “although the management board is committed to these ideas, cascading them over the organisation is taking some time, basically relating to

all practices and traditional behaviours which help to communicate the philosophy of any company”. (Marketing Director, May 2005)

Currently there are some Spanish insurance companies that are trying to use loyalty programs. “Firstly, these schemes are not entirely orientated towards understanding what customer wants and are given indiscriminately without profiling customers or analysing their individual cost (Research Studies Manager, ICEA, December 2006)”. Although they are not very sophisticated (effective), it can be concluded that companies are investing in customer information and organisational tools and structures to capture and manage that information.

Another limitation for the implementation of customer retention relates to the traditional business structure and the low level of personal contact between the customer and the insurance provider. “Historically, the insurance industry has only focused on capturing the necessary information to quantify the premium price during the first (and sometimes unique) contact. It also was considered that the lower the contacts, the better the relationship was” (Market Research Manager, April 2005). This lack of data and updating of activities are making it even more difficult to keep up with other industries on issues like customer retention. As a result, insurance providers may end up going ‘blind’ when designing their strategies. This is partially due to some cultural barriers in the adoption of Relationship Marketing ideas. “Due to the fact that a good customer was characterised by a low contact level, the re-education of staff on keeping an open and live relationship by gathering and satisfying customers is going to be challenging and will take a while” (Marketing Director, Company A, November 2005). This shift from a product-orientated business towards a customer-orientated business will be difficult at first, and management has to be engaged in the loyalty paradigm. Secondly, high investment is required, and finally the staff has to be committed to keeping those relationships alive as their success depends entirely on their actions ([www.crm.com](http://www.crm.com)).

Respondents agree that this situation has provoked a change in the type of analysis that companies have been carrying out in their situation. The industry’s objectives

used to revolve round market share and income, but now, they include number of customers, number of customers per channel, average profitability and acceptable churn, amongst others (Marketing Director, Company A, April 2005; Marketing Manager, Company C, May 2005; Research Studies Manager, ICEA, December 2006). It might not be a great advancement, but it is a start. Consequently, the Spanish insurance industry is transforming as a result of the changes in the legal environment, social changes and the internationalisation of the industry. A consequence of this transformation is an increasing competency in the industry i.e. (new providers, new channels, new offers) which have proved a need for the way insurance companies treat and understand their customers. Regarding this shift, customer retention seems to be recognised as a winning strategy, not only to ensure the survival of the companies, but also to provide customers with more value and a better service.

Coming back to the original purpose of this project, research question one focuses on assessing the validity of customer retention for financial services providers. From the answers received from the respondents of the first Case Study, Company C and ICEA, it can be concluded, that customer retention is perceived to be an invaluable strategy to be developed and promoted in the Spanish insurance industry.

#### **4.3 What is the role that Cross-selling has to play in the industry?**

Within the customer retention strategy, cross-selling and up-selling have been recognised to be highly relevant. As customers increase the number of products that they acquire from a company, it becomes more difficult to switch provider and easier to build a relationship between the company and the customer (Salazar et al., 2007). However, there are some barriers to the entire implementation of cross-selling as a retention and relationship tool. Some of the problems come from traditional processes still prevalent in the organisation, whilst others come from the lack of pro-activity by some companies as they do not have the data (agents own them) or it is difficult to get access to it, and, finally, as the market keeps growing (less than before) companies have still not seen the dangers of their current situation. The advantages of cross-selling are clear as the company retains good customers,

reinforcing their decision and making their lives easier. The problem is that until retention strategies and loyalty perspectives are not given the green light from organisations, it will be difficult to discover and properly manage cross-selling/up-selling opportunities.

In the specific case of the Spanish Insurance Industry, Cross-selling plays a paramount role. Actually it is one of the strategies that firms are aiming to develop in order to survive in a highly competitive environment. “In our company what we do is calculate some propensity figures which are continuously tested to refine them. The first step is mapping customers into different segments. Each segment is associated with some “priorities of approach” and “ways of approach”. Moreover, our strategy focuses on a double approach. We try to make customers loyal by selling them more products and we also try to sell them more products by retaining them first. So far, if our normal return was seven points, after the implementation of this preliminary strategy a return of 12 points is generated” (Marketing Director, Company C, April 2005).

“Cross-selling is radically important in the Insurance Industry with a promising future over the following years. Experience has shown that when a customer has a good relationship with a company (the customer acquires more than one product), his/her retention and profitability increases” Marketing Director, ICEA, December 2006. Actually, it is more difficult for competitors to “steal” a customer who consumes a few products from you than when they just have one product. The end result is, “if I don’t try to retain my customer, my competitors will do it” (Market Research Manager, Company A, September 2006). Therefore, the question is not whether cross-selling has a future, but if the future exists without retaining and cross-selling strategies. “The first advantage of cross-selling is retaining customers, but it also allows obtaining all the potential value from customers. The key point is designing sound cross-selling strategies” (Marketing Manager, Company A, May 2005). So far, companies have looked at their customer consumption and whether they had car insurance, but not home insurance. In the next communication the customer would receive some information about home insurance without taking into

consideration whether, in the past, the customer was offered the same product, rejecting it or if we had already cancelled his home insurance policy because of his high risk. “Anyone can see that this is not the right way to operate” (Research Studies Manager, ICEA, November 2006). Instead, the objective should go along the lines of offering the right product to the right customer. In this regard, “when we have tried to use some indicators (like purchase propensity) the results have been very promising, but we still have a long way to go to use the right data to discover new business opportunities. As a result, those positive results have given strong arguments for the sales force to commit to customer retention and to the management board to invest time, money and effort in these new ideas” (Marketing Director, Company C, May 2005).

The main difficulty associated with having an effective cross-selling strategy consists of identifying the right people to approach. Simply said, the issues are managing the data properly to get the right information. Moreover, in contrast to other industries where people are already committed towards these ideas, traditionally “our sales forces have been too occupied with all the administration and bureaucracy relating to the process of thinking of how to take care of customers. This precious time which has been wasted has to be recovered via automation or centralisation of processes” (IT Manager, Company A, September 2005). In this regard, cross-selling might not be the only strategy to survive, but it is a crucial one as customers are becoming more aware of their value to any company and want to be properly managed (Studies Director, ICEA, December 2006).

To summarise, this section has aimed at investigating to what extent cross-selling and up-selling are perceived by the Spanish insurance industry as a valuable strategy to retain customers (research question 2). From the discussions with the companies involved in the first case study, it can be concluded that companies are aware of the benefits of increasing the wallet share of their customers, not only in terms of profitability, but also in terms of the impact that higher consumption has on enhancing the relationship “company-customer”. Therefore, research questions one and two have been satisfactorily answered according to the ideas explored on the literature review.



## **Conclusion**

This chapter has displayed a clear picture of the current Spanish insurance market by combining data from the industry and the views of several players who interact daily with those realities. This description has been very helpful in order to understand the role that customer retention and, specifically, cross-selling can play in those circumstances. It seems clear that the conditions of the industry, characterised by a mature market, where high competition and customer sophistication are current realities, is forcing insurance providers to move towards the idea of retaining customers and making the best of the opportunities that those existing clients represent. In this scenario, companies in general, and Company A in particular, have realised the opportunities which could be found in cross-selling and up-selling to customers based on a careful profile of their customers and their consumption habits.

The main output of this chapter relates to answering to research questions one and two. This means, that after conducting the qualitative research in Case Study A, customer retention seems to be a top priority for Spanish insurance companies. In addition to this, the participating companies are also aware of the value of cross-selling and up-selling strategies in general and to enhance customer retention in particular. As derived from the Methodology Chapter (Chapter 3), having evidence of the relevance of customer retention and cross selling was considered crucial to progress with the research.

After demonstrating the value of customer retention and cross-selling and up-selling in this industry, the next step consists of developing the framework to design sound cross-selling and up-selling strategies (Who-What-When) and addressing whether a common strategy is suitable for company A or in contrast, several strategies are needed to respond to different customers' needs (research question three). Therefore, the following chapter will address the quantitative research section for Case Study A, where research question three will be addressed for the Spanish insurance industry, and, accordingly to the result of this test, one or several cross-selling strategies will be developed by taking into consideration: customers characteristics (Who), purchase pattern (What) and time issues (When).

**Chapter five**

**Case Study One- Company A:**

**Customer Retention & Cross-selling**

**in the Spanish Insurance Industry.**

**Quantitative Research**

## **Introduction**

The previous chapter uncovered the relevance of customer retention in the Spanish insurance industry. Additionally, the responses in relation to Case Study A revealed that cross-selling and up-selling are extremely interesting strategies for companies in the Spanish insurance industry. The extent of those two statements constitutes the qualitative research for the first case study. It is now time to complete this case study, by looking at the quantitative stage. This is the primary objective of this chapter.

As mentioned in previous chapters, the quantitative approach relates to the application of the framework “Who-What-When” to discover cross-selling and up-selling opportunities. This framework, derived from the research conducted in the pilot project, will be used to answer to the last research question about how to identify cross-selling opportunities for companies. This question has been translated into Research Question Three, which assesses whether a common cross-selling strategy is valid or if, on the other hand, those strategies depend on the customer, his consumption patterns and the times when purchase decisions are made.

In order to address this question, the analysis begins with a segmentation process (WHO) which will be based on socio-economic and consumption segmentation variables. Next, the main question is whether a common cross-selling and up-selling plan is suitable for the customer base, here the validation of the segmentation and its results are crucial before moving into the second analytical phase. After the segments and their differences, the next stage is about defining the products that customers are more likely to acquire next (WHAT). This is done by using Probability Modelling, Markov Chain Processes and their results, will be presented in a graphical way, in order to understand relationships between products and how they vary across segments. After knowing which products are more likely to be acquired next, in each segment, the final step will take a time perspective by trying to predict the time when those purchases are more likely made (WHEN). The “What” and “When” analysis will be done for each segment and from their results, goodness of fit and internal validity will be derived in order to address Research Question Three.

## 5.1 Case Study A Data

For this research, Company A provided a complete transactional database of its current customers or at least those who even though not very active, still have some policies from Company A. The data set is formed by, approximately, quarter of a million customers whose relationships with the company stretches, in some cases, to over twenty years. For each customer, the data set records: (1) socio-economic information (current age, gender, location, marital status); (2) transaction figures (products consumed<sup>27</sup>, channel used for each purchase, premium value of each policy, dates of acquisition); and (3) an approximation of customer profitability (Value<sup>28</sup>) which has been a feeble attempt to value customers based on the number of products consumed, the type of products and their premium (See Appendix 3, section 1).. After the clearance process, the data set reached over 230,000, which will be separated into three random data sets<sup>29</sup>: (1) Training (50% of the data set); (2) Validation (25% of the data set); and (3) Test (25% of the data set). The main test will be conducted on the training sample. This process will be replicated on the validation sample, to make sure that the results are consistent. This will also prove that the segments are internally homogeneous. The final sample simply validates that the previous results are statistically equal and significant; therefore, again, it validates the internal validity of the analytical process.

## 5.2 Step 1: WHO buys from Company A?

The main objective of this section is aimed at understanding the customer base, firstly, in order to group customers into meaningful segments, according to their characteristics and consumption. Due to these differences, grouping customers with specific needs and consumption patterns makes sense, under the original aim of discovering cross-selling strategies in order to enlarge their relationship with Company A. The identification of segments has been obtained by using clustering techniques applied to the original customer data base provided by Company A.

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<sup>27</sup> The number of products consumed has been limited to five, due to the complexity of Company A to merge the data from several data bases.

<sup>28</sup> The variable Value is used to classify customers, in ascending order, in the following categories: Nickel, Bronze, Silver, Gold and Platinum.

<sup>29</sup> This division into three data sets, in opposition to the usual option of having only two: one for training and another for validation, is one of the features of SAS Enterprise Miner®, that allows extra confidence on the results of the model, when the data set is large enough.

As explained in the methodology chapter, the techniques used for the segmentation was K-Means Clustering Technique and all the socio-demographic and transactional data<sup>30</sup> were included in the model as discriminant variables. Despite being one of the most used techniques in clustering analysis, this technique has the issue of the selection of the final number of clusters, which is decided before hand. As a result, a process of ‘trial and error’ was used in order to keep refining down the solution to end up with a manageable number of clusters which, on the other hand, were not too general.

The variables introduced in the model correspond to socio-demographic variables (age, gender, professional activity, marital status) and behavioural variables (number of products, channel, first policy, first channel, total premium<sup>31</sup>, and profitability). The reason for this is that they rely on the idea that it is not only important to understand who the customers are, but also how they behave during their experience within the company. After several iterations of introducing variables, avoiding highly related ones<sup>32</sup> (i.e. current age and age at the first purchase), and excluding others with proven low impact on the model (i.e. gender), the final solution was achieved. This solution was the result of combining the variables: Age, Total Products, Professional Activity, First Policy and Length, as the segmentation criteria. Among the features of SAS Enterprise Miner® is the production of a significant table (Table 5.1) which ranks the discriminatory power of each variable in the solution. One of the main conclusions that can be drawn from this table is the strength of Age as a discriminatory value. This result suggests the influence of the Customer’s Life Cycle on the acquisition of financial services. It means that certain products are more likely to be associated with certain stages of the life cycle than others. The relationship between consumption and age will be discussed in more detail in the description of each cluster.

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<sup>30</sup> Only variables not correlated were included in the model to avoid multicollinearity issues.

<sup>31</sup> Due to the high variance of TOTAL PREMIUMS, this variable has been transformed (standardised) before introducing it into the model, to avoid any disturbance generated by it.

<sup>32</sup> Before initiating the K-Means analysis, the correlation between variables was tested. The reason for this is that highly correlated variables will highly distort the solution because of the degree of multicollinearity.

After running the K-Means clustering technique, the final solution ranged between three, four and five clusters. The final decision of selecting four segments was made by using the Cubic Clustering Criterion (Sarle, 1983) and the P-Seudo F statistic developed by Calinski and Harabasz (1974)<sup>33</sup>(Table 5.2). The last criterion used to test the internal validity of the solution was  $R^2$  which, for the four cluster solution, reaches a value of 72%. This means that out of all the variability of the data, the “four cluster solution” explains 72%. Although a higher goodness of fit may be desired, due to the complexity of trying to group individuals, the result is highly satisfactory. Apart from being a measure of the goodness of fit,  $R^2$  can be used as a criterion to select the adequate number of clusters. Although the five cluster solution has a higher  $R^2$  value, it only represents an improvement of 4% over the four cluster solution, with the inconvenience that adding another cluster would increase significantly the complexity of the process. As if this improvement was not significant enough, when moving from a three cluster to a four cluster solution the improvement on  $R^2$  was over 10%. That was significant enough to consider the complexity trade-off for selecting the final solution with four clusters.

Table 5.1: Company A Possible Segmentation Solutions

Significance Table

Age	1
Marital Status	0
Area	0
Prof. Activity	0,4768125
Channel	0
Total Products	0,0723491
Life at company	0,2432180
Product 1	0,6654897

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<sup>33</sup> For the CCC  $R^2$ , the lower the value, the more confidence in the solution, and for the Pseudo F – Statistic, the higher, the better.

Table 5.2: Company A Segmentation Final Solution-Variables Significance

	3 Solution	4 Solution	5 Solution
Cluster 1	16236	9979	29206
Cluster 2	58657	53254	34856
Cluster 3	17711	6238	19656
Cluster 4	*	23133	6921
Cluster 5	*	*	1965
R <sup>2</sup>	0,64068	0,71677	0,75876
CCC	41,616	42,824	43,791
Pseudo- F stat	96435,84	98919,16	99194,52

In order to give a general overview of each cluster, Table 5.3 displays the main features of each segment. The values are the average figure for the continuous variables (age, starting age, number of products, life within the company), and the category which occurs mostly for the categorical variables (profession, marital status, channel, value, product 1 and channel 1). By combining those qualitative and quantitative characteristics, a label for each segment was defined under the objective of verbally summarising those features.

Table 5.3: Company A Cluster Classification

Label	<b>Risky Youth</b>	<b>Family Projects</b>	<b>Mature Milk Cows</b>	<b>Potential Jack Pots</b>
	Cluster 1	Cluster 2	Cluster 3	Cluster 4
Size	9979 (10.77%)	53254 (57.50%)	6238 (24.98%)	23133 (18,93%)
Age	26,004	39,301	75,41	57,35
Profession	Services/Students	Services	Retired	Services
Life within firm	1,329	4,129	10,154	5,274
Marital Status.	Single	Married	Married	Married
Total Prod.	1,406	1,98	1,359	1,568
Channel	Financial Inst.	Mixed	Mixed	Direct
Value	Nickel	Bronze	Gold	Silver
Starting Age	24,675	35,172	65,256	52,076
Product 1	Life/Risk	Home Insurance	Home Insurance	Car Insurance
Channel 1	Direct	Financial Inst.	Direct	Direct
Region	Vizcaya	Guipúzcoa	Guipúzcoa	Vizcaya
Average Premium	302,6€	510,68€	795,54€	659,85#

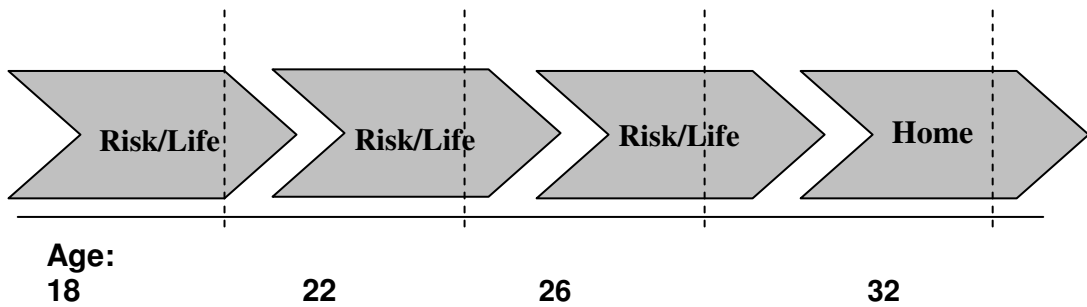
### 5.2.1 Cluster 1: Risky Youth

The first cluster accounts for 10.77% of the sample. It is mainly composed of young customers (late 20's), who have recently started their professional careers or are students about to do so. Risky Youth represents mainly single people who have been in the company for around 2 years (1.329) located in Vizcaya. Their consumption is still quite low, just 1.40 products, as they have not reached yet their financial maturity. Moreover, this limited purchase has a relatively low average premium (302 €), mainly coming from Risk/Life Insurance using the Direct Channel (DC). All this puts Risky Youth into a very unprofitable position within the organisation (Nickel).

Looking at Risky Youth consumption (Graph 5.1), it identified that Risk/Life Insurance was the most popular product during the first purchase (42.08 %) and it remains in this leading position for the remainder of the purchases. This suggests clear up-selling or up-grading opportunities. After Risk/Life Insurance, Home Insurance occupies a second position, closely followed by Car Insurance after the third purchase.

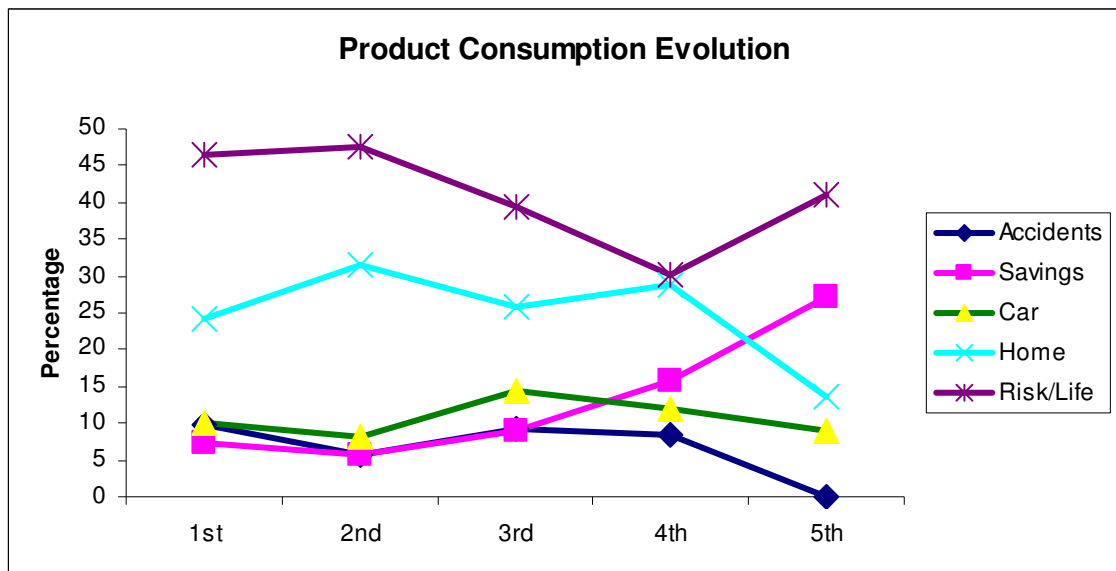


Graph 5.1: Company A Consumption Sequence Risky Youth



A possible explanation for this heavy consumption of Risk/Life Insurance, is that one of the ways in which Spanish car drivers under 25 can get access to affordable car insurance is by acquiring another policy from the same insurance provider (usually a low premium product like Risk/Life Insurance policies). This previous purchase makes insurance providers more open to offering a car insurance policy to a targeted group, which was not originally very attractive, due to its high risk. After that, and following the natural movement of the Customer Life Cycle, Home Insurance appears as a cross-selling alternative for this segment as this cluster starts approaching the age of durable products acquisition.

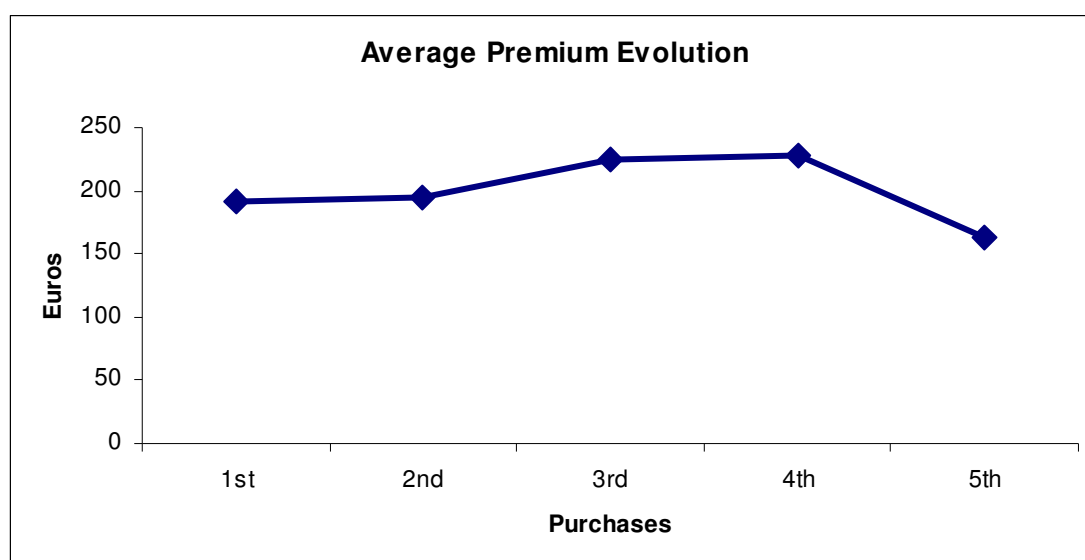
Graph 5.2: Company A Product Consumption Evolution Risky Youth



From the above figure (Graph 5.2), the important role of Risk/Life Insurance can be concluded for Risky Youth. However, its consumption decreases over time, being replaced by products like Home Insurance and Car Insurance in the middle of the consumption pattern, and by Savings at the end.

Due to the limited acquisition power of this segment, the analysis of the premiums (Graph 5.3) has a very flat evolution, which slightly increases with purchases corresponding to Home Insurance and Car Insurance (after the second purchase), to decrease again, with the acquisition of Saving products.

Graph 5.3: Company A Premium Evolution Risky Youth

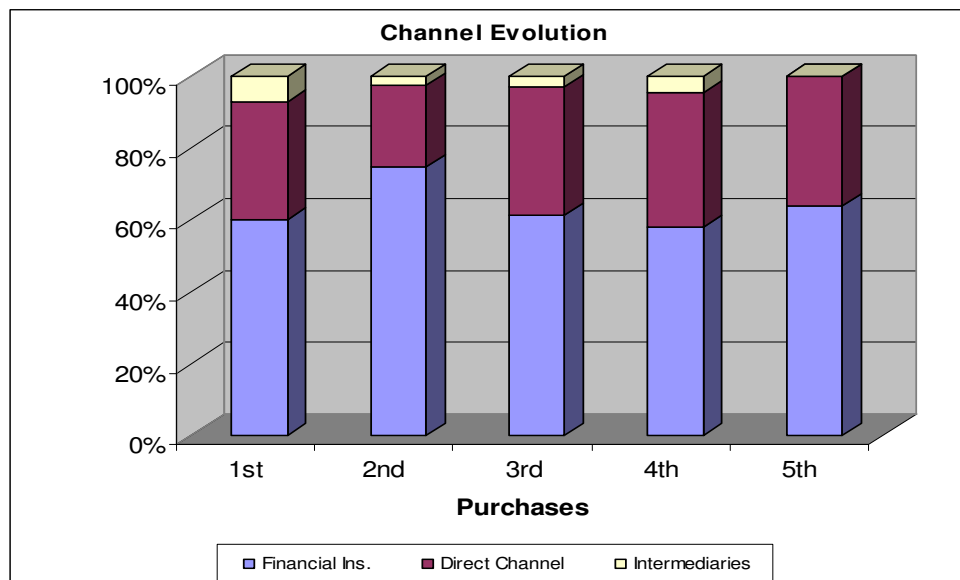


An analysis of channel<sup>34</sup> (Graph 5.4) suggests that Risky Youth starts their relationship with the company from the Financial Institution (FI) whose influence remains strong through five different purchases. Actually, FI increases its presence for the second purchase (75%), coinciding with the acquisition of Home Insurance Policies. After that, FI comes back to its original level for this cluster, around 60%.

<sup>34</sup> Company A counts for three distribution channels for its insurance products. Firstly, the Direct Channel (DC) which represents a network of branches located across Spain; the Intermediaries Channel (IC), which represent independent financial services providers, who also offer other insurers' policies; and finally the branches of the Bank associated to the corporation. The so called 'Financial Institution' in this study. (FI)

Finally, evolution of the Intermediaries Channel (IC) presents a clearly decreasing pattern which ends with no presence on the last purchase. In conclusion, this segment shows a clear preference of the FI channel, over the others.

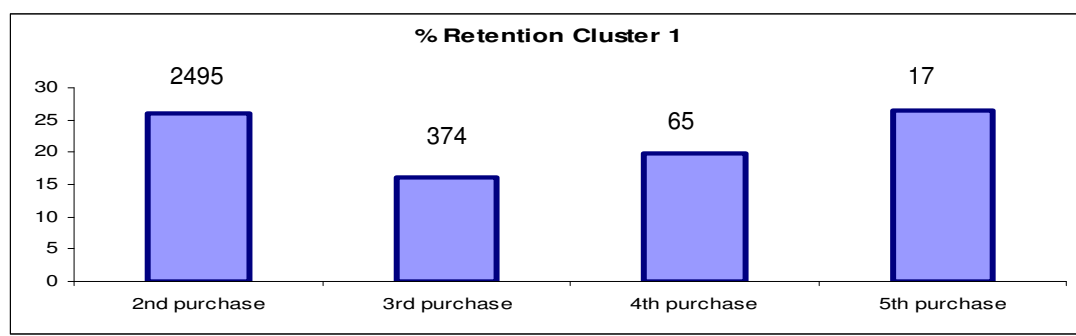
Graph 5.4: Company A Channel Analysis Risky Youth



A look at the active retention<sup>35</sup> figures for Risky Youth (Graph 5.5) shows that just 25% of members acquire a second purchase and after that, just 15% remain as actively buying customers. However, once customers have past the third purchase, retention ratios increase with 20% in the forth and 25% in the fifth purchase. This means that, although retention levels are not high, good management of customers should not only increase the repurchase ratio after the first purchase, but will also help to continue the increasing trend observed after the third acquisition.

<sup>35</sup> Active Retention attempts to represent those customers who, after acquiring a policy, have actively continued acquiring products from Company A. In opposition, Company A has other customers who, if well, are still customers (their policies are active). They have not increased the number of products consumed from the firm.

Graph 5.5 Company A Active Retention Analysis Risky Youth



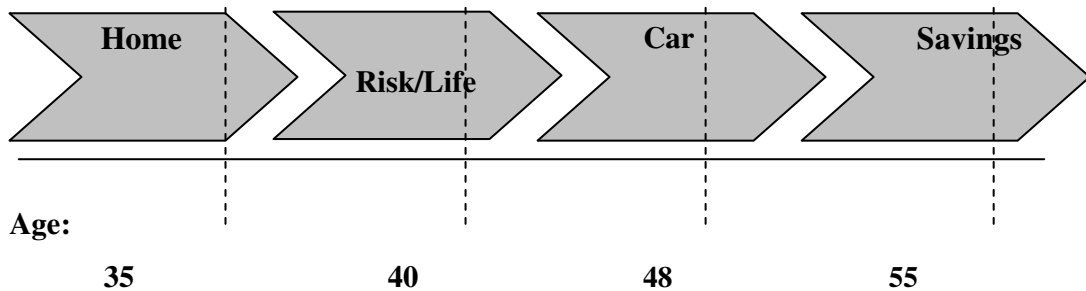
In conclusion, this segment is characterised by the acquisition of a very specific product (Risk/Life Insurance) whose consumption offers some clear up-selling opportunities, and for those who find the up-grade is no longer interesting, there is some cross-selling later on in the life cycle. One of the main concerns around this cluster is that it is not a very attractive segment (low premiums, high risk) at it is. However, as members become older, their financial needs, in general, as well as their insurance products needs, will increase, becoming more and more interesting for Company A. Additionally, a total dependency on FI for the distribution of products may make very challenging for Company A, the definition of a relationship-building strategy for the future with those customers who, at the moment, Company A do not manage directly.

### 5.2.2 Cluster 2: Family Projects

Cluster 2 accounts for the largest proportion of the customer sample (57.50 %). It is mainly composed of married couples in their late 30's whose main professional activity relates to liberal and service industries. Family Projects customers have been in the company for around four years (4.219) located in Guipúzcoa. Their consumption, although quite low, is the highest of all four clusters (1.98 products). Although this cluster has the highest consumption, they expend a relatively low average premium (510 €), mainly coming from Home Insurance using FI. Due to this, Family Projects have been categorised as 'Bronze' in the profitability scheme of the company.

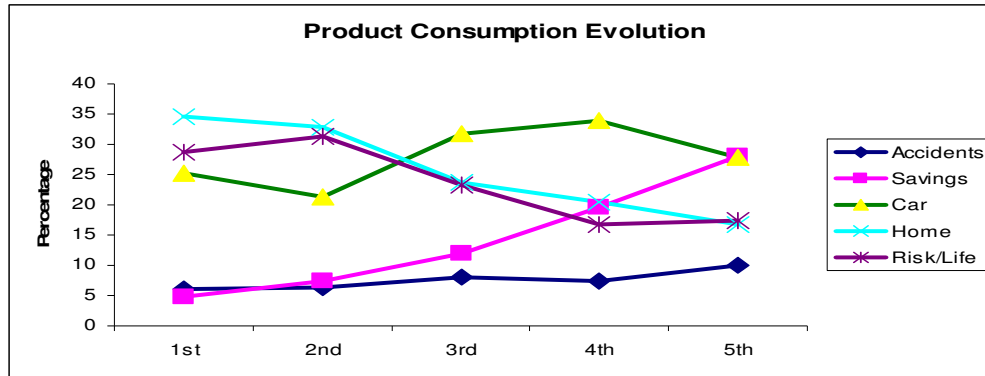
The consumption of Cluster 2 (Graph 5.6), begins with Home Insurance Policies with 34% of purchases, mainly offering cross-selling opportunities for prospect purchases: Risk/life Insurance first; Car Insurance in second place; and Savings at the end of the purchase cycle. This has been summarised by the following figure:

Graph 5.6: Company A Consumption Sequence Family Projects



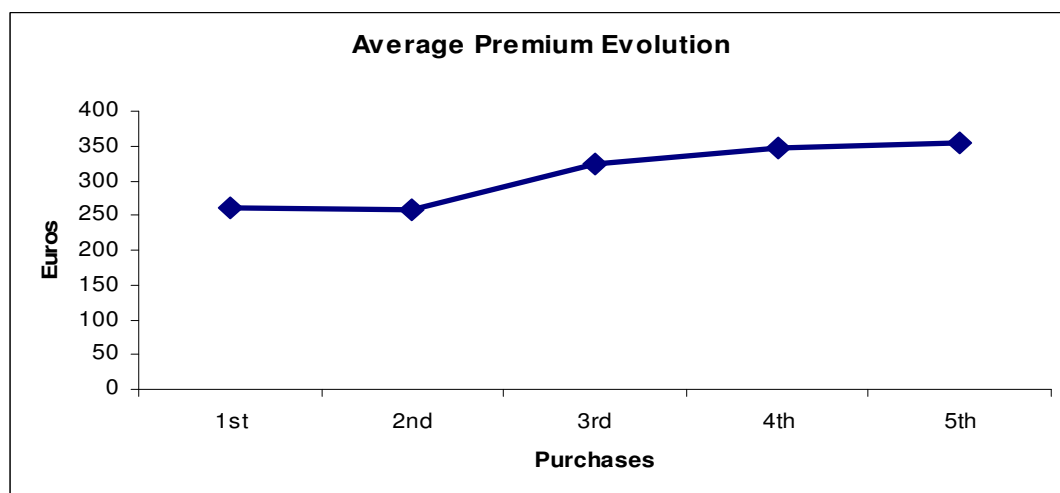
The above diagram responds to some of the realities of the current Spanish situation. “Due to the fact that young people leave their parental home in the early-mid thirties, the acquisition of their own house does not begin before they are married and ready to have their own family” (Research Director, ICEA, December 2006). This is the beginning of Family Project’s financial product acquisition which is usually expensive and slow. Once the “nest” has been sorted out, new necessities crop up like a Risk/Life insurance to protect the family stability. After that, it is the turn of the car; the old one is around ten-twelve years old and usually the growth of the household requests a new and/or bigger family car. After that, customers turn towards thinking about retirement and trying to be prepared for it.

Graph 5.7: Company A Product Consumption Evolution Family Projects



The evolution of consumption (Graph 5.7) confirms a clear decline in Home Insurance after the first purchase, with a close presence of Risk/Life insurance, which presents a similar behaviour with different purchases. Those two are clearly over-taken during the third purchase by Car Insurance, which remains in the lead until Savings reaches their peak on the fifth purchase. As mentioned before, this cluster has started a stage of heavy expenditure which might be the reason for the relatively low monetary value of the premiums. However, these premiums show a clearly increasing trend which talks about higher profits in the future, from the company's perspective (Graph 5.8).

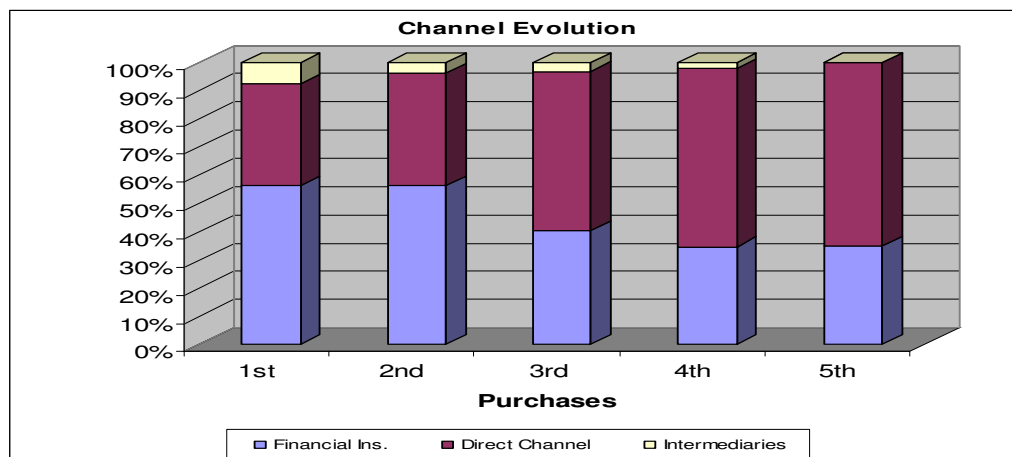
Graph 5.8: Company A Premium Evolution Family Projects



The evolution of the channel preferences presents a mixture of behaviour (Graph 5.9). From a clear dominance of FI with around 60% of the first and second

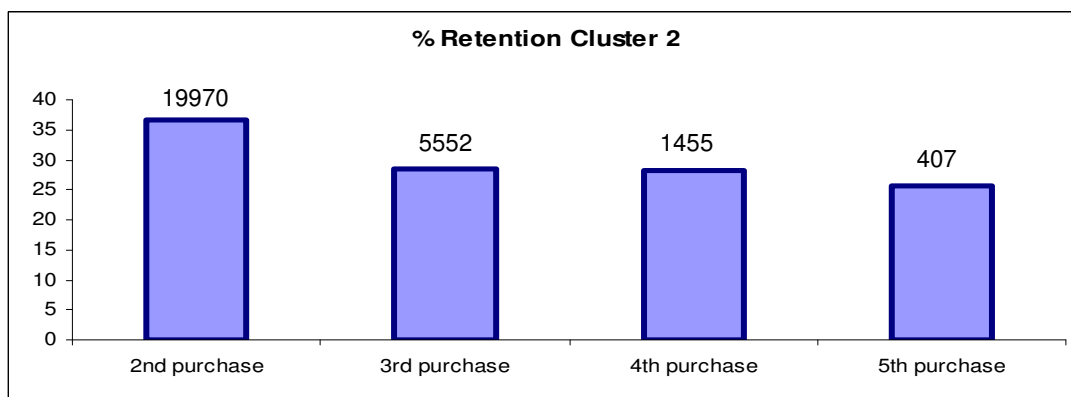
purchases, DC takes the lead with the rest of the financial purchases, to become the preferred channel by 65% of Family Projects at the end of the fifth purchase. This can be the result of the combination of two factors. Firstly, the first two policies (House and Risk Insurance) are traditionally products managed and negotiated by the FI, whilst Car Insurance is almost exclusively DC's territory. Secondly, as the relationship between insurance providers seems to be positive and satisfactory, customers may prefer contacting the company directly, to using alternative "indirect" routes. Also, time pressures related to family commitments may be another reason for the preference of the DC.

**Graph 5.9: Company A Channel Evolution Family Projects**



A close analysis of the active repurchase trend of Cluster 2 (Graph 5.10), suggests a few interesting issues. Firstly, Family Projects present the highest repurchase ratio amongst all the clusters. Actually, around 36% of its customers acquire a second purchase. However, this "high" repurchasing proportion drops after the second purchase, where just 25% effectively buy a third purchase. Secondly, after the third purchase the repurchase values remain quite steady until the end of the analysis. The main challenge here is not so much about encouraging the second purchase, although it also should be taken into account, but about making customers go beyond the third purchase.

Graph 5.10: Company A Active Retention Family Projects



To conclude, young people tend to leave the parental house later now than ever before (around their mid 30's, [www.ine.es](http://www.ine.es) visited on June 20<sup>th</sup> 2006), when they have the capital to buy their own property. Once they have started their own family and, as a kind of protective measure, some liberal professionals (usually with less social covering) consider the purchase of a Life Insurance to cover the family in case of an eventuality. Usually this policy remains unchanged without too much attention from the beneficiaries. Once customers reach their 40's they can be considered as starting the peak of their career, they consider getting a second car for the household. Moreover, Family Projects represents a big proportion of the customer data base which makes managing it properly, crucial for the organisation. The challenge here is to move customers to the third purchase, where the DC leads and a more close relationship could be built. This is very important as the financial maturity of this cluster gets closer with lots of business opportunities, mainly coming from cross-selling.

### 5.2.3 Cluster 3: Mature Milk Cows

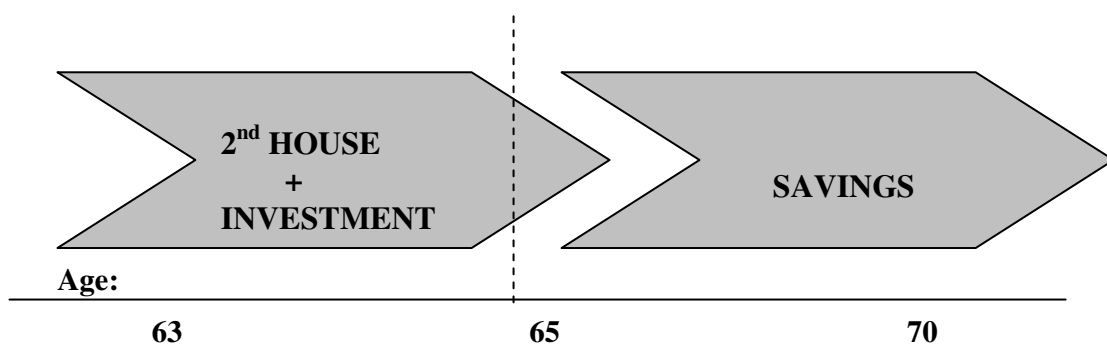
This cluster accounts for around 25% of the sample. Its members are mature in age for the acquisition of financial products as they are in their mid 70's and also their caption age can be established around their mid 60's (65.256). This leaves an average relationship length of approximately 10 years (10.154), which is the highest among the three clusters. As expected, their main professional category falls into 'Retired'. Moreover, these customers are married and mainly located in Vizcaya, one of the



regions of the Basque Country where Company A has a leadership position. In terms of their purchase behaviour, Mature Milk Cows consume just 1.35 products from the company. Their initial consumption focuses on Home Insurance, probably associated with the acquisition of a second house. This acquisition has been done through the FI, which makes sense as it has probably negotiated the mortgage too. Although this segment might not have a very large consumption rate, their average premium is the highest with a value of 795.54 €. Finally, in terms of their profitability, they are located in the ‘Gold’ category, which reinforces the value that they represent for Company A.

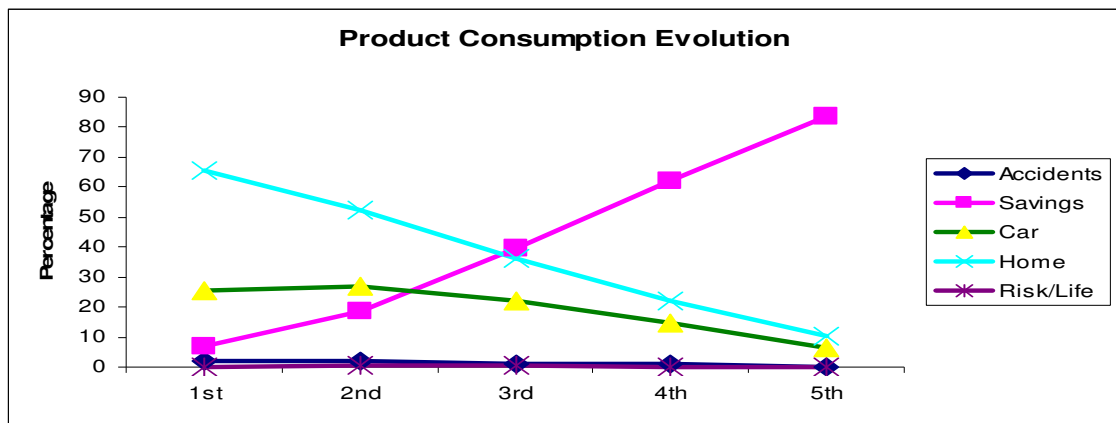
A close analysis of Mature Milk Cows’ consumption (Graph 5.11) presents a distinctive consumption pattern. The first product centres on Home Insurance with 65% of the basket mainly acquired by the FI. From this first policy, the second purchase, again, presents a predominance of Home Insurance (52.12 %), closely followed by Car Insurance (27.04 %). This situation not only offers Up-Selling opportunities for Home Insurance, but it also opens the door for Cross-Selling of new products. After that, Home Insurance (36.28 %) and Savings (39.82 %) come “head to head” as the main products of the basket, which basically offer chances to upgrade the policies already acquired. The fourth purchase is where Savings finally over-take Home Insurance remaining, as the most important option for the rest of the purchases. This consumption can be summarised in the following graph:

Graph 5.11: Company A Consumption Sequence Mature Milk Cows



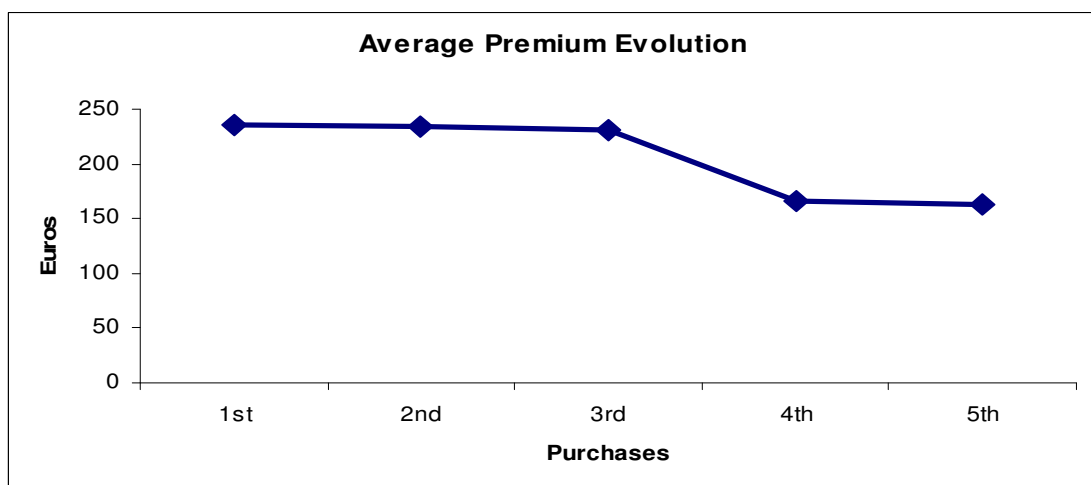
This consumption pattern corresponds to another Spanish trend (Graph 5.12). “First, there is a trend towards acquiring a second house, which can either be used as an investment or as a holiday residence (Research Director, ICEA, November 2006). Next, the prevalent product remaining is Savings Policies. The acquisition of this product is quite logical as this group is approaching retirement age (65 years in Spain) and all disposable income is meant to be used to ensure a pleasant time during retirement.

Graph 5.12 Company A Product Consumption Evolution Mature Milk Cows



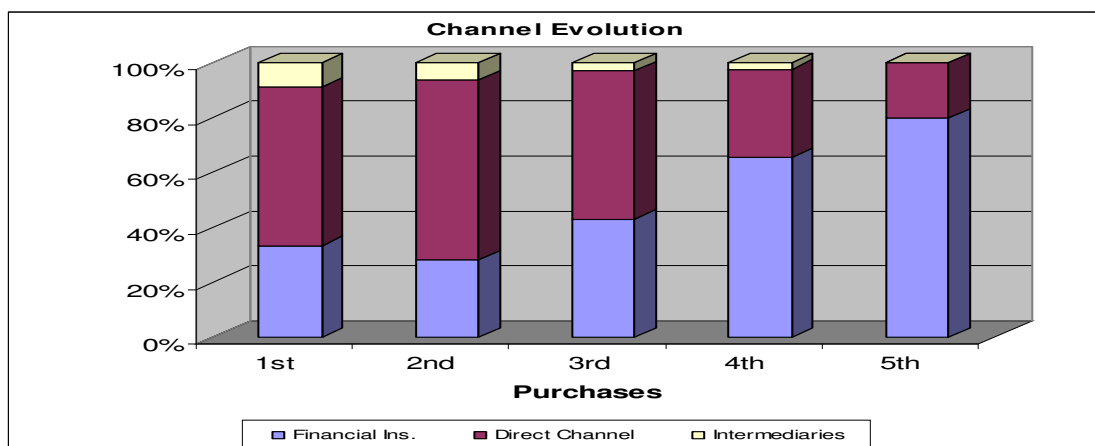
A look at the evolution of the average premiums (Graph 5.13) shows a steady level across the first three purchases, and after that there is a slight decline which coincides with the acquisition of less expensive policies than Home Insurance, such as Savings.

Graph 5.13: Company A Premium Evolution Mature Milk Cows



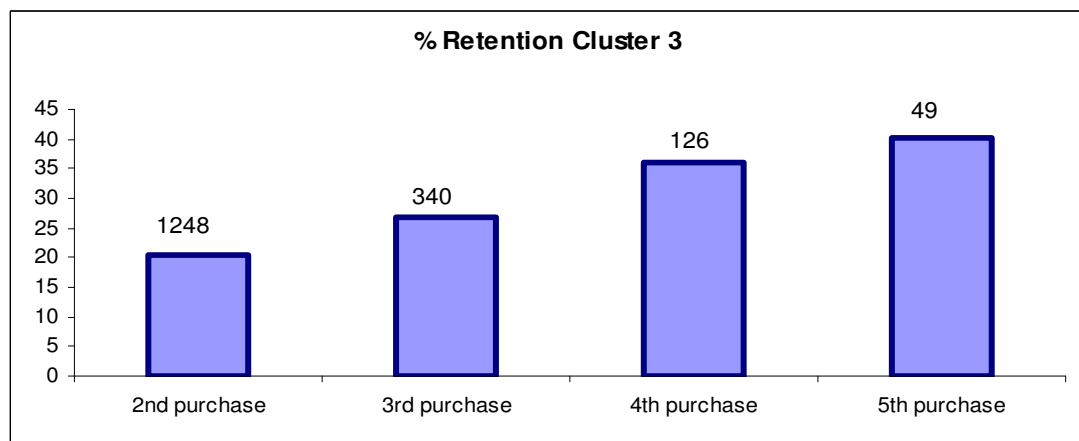
Finally, the analysis of the sales channel (Graph 5.14) suggests how customers have a preferred channel for each purchase. In opposition to the other clusters, it could be deduced that this cluster is mainly captured by the DC (57%), which remains the most important channel until the third purchase, while customers are acquiring Home Insurance for their second house. This pattern is interesting as this product seemed to be highly associated with the FI. However, the fact that the financial institution's presence is small, it might be explained by the fact that due to the high levels of disposable income of this group, the needs for mortgages are small. In this way, the selection of Company A seems to be based more on a personal customer convenience/attachment than on a pre-organised pack "Mortgage + Insurance". However, as consumption continues, the FI leads the channel selection associated to the acquisition of Savings Policies (66% on the fourth purchase and 80% on the fifth). This evolution is a bit surprising; as the other clusters tend to switch towards DC once the relationship has been established or they have remained on it since the beginning. A possible explanation is that the company's inefficient management of the DC means that there is not enough information about this product or that it is not pro-active enough, as customers will select another channel (FI) for a product traditionally acquired through more direct means (DC). The increase in customers who select the FI as their preferred channel, not only comes from a reduction of the DC, but also from customers switching from Intermediaries (I) whose presence reduces until it disappears in the fifth purchase.

**Graph 5.14: Company A Channel Analysis Mature Milk Cows**



Mature Milk Cows presents a different repurchase from the other clusters (Graph 5.15). In this way, just 20% of the cluster acquires a second policy, but, after that, the repurchase ratios increase through prospective purchases with a 26%, 36% and 40% on the third, fourth and fifth acquisitions. Apparently, the critical point for this cluster is the first repurchase, so Company A should pay attention to this issue to ensure a profitable long-term relationship with this cluster of high potential.

Graph 5.15: Company A Active Retention Mature Milk Cows



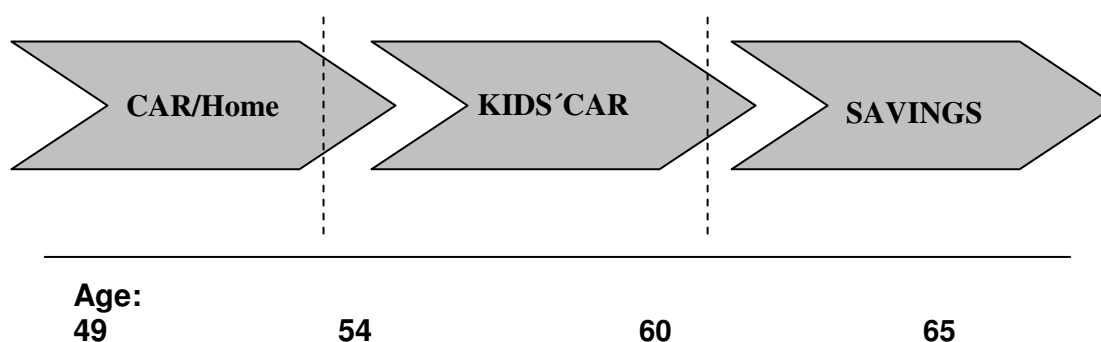
Due to all the socio-demographic and consumption characteristics explained above, this segment seems to be of great interest to the company as: (1) their consumption centres on the most important strategic products for the company; (2) their average premiums are highest than other clusters'; and (3) their profitability ratios approach the maximum level. All these factors are of paramount importance to maintain Mature Milk Cows within the company. The main threats can be found in two areas. First, in considering the advanced ages of its members makes them less susceptible to depth consumption as their income level is expected to drop significantly. This situation is inevitable as time cannot be stopped. However, "capturing" them early enough or trying to reduce the length of inter-purchase lapses could be possible strategies to retain and increase business opportunities associated with Mature Milk Cows. Second, the relevance of the FI as Company A depends on someone else to approach this group of high interest.

#### 5.2.4 Cluster 4: Potential Jack Pots

Potential Jack Pots is the second smallest cluster accounting for 18% of Company A's customers, mainly located in Guipúzcoa. These customers are married and in their late 50's, with professional activities based on the service industry. These activities are also called liberal activities. All this is associated with financial maturity: more income is disposed of and therefore further business opportunities should appear. By having a relationship with the company of around 5.27 years, they acquired their policy when they are in their late 40's or early 50's. This first acquisition relates to Car Insurance using the DC to negotiate the conditions. Although this segment presents the second highest consumption ratio amongst the four clusters (almost 1.6 products), there is still room for potential growth in terms of the number of policies purchased, or of the premiums for the policies already held (current average premium is 659.85 €). If this happens, the associated profitability should dramatically increase from the average position (Silver) to that which Potential Jack Pots currently hold.

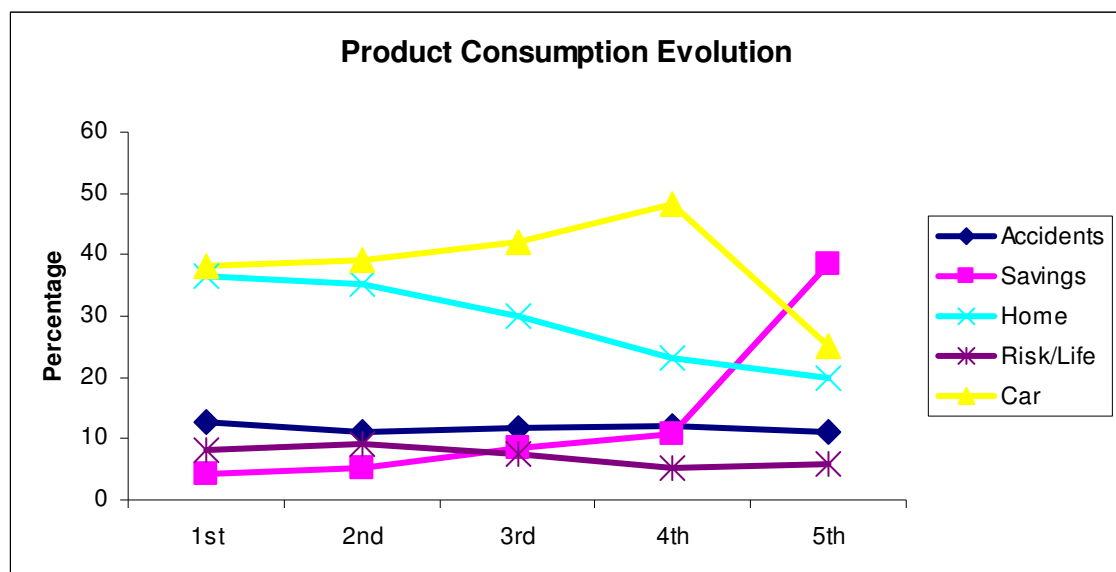
The consumption pattern of Potential Jack Pots (Graph 5.15) starts with the acquisition of Car Insurance policies (38.28 %), closely followed by Home Insurance (36.36 %). It is not until after the fourth purchase when Savings takes the lead (36.74 %) over Car Insurance (25. %). During the first four purchases, Car Insurance reappears as the most acquired policy (34.51 %), where it remains for further purchases. This situation offers clear opportunities for up-selling (car insurance, mainly) and cross-selling (home insurance and savings). Once again, this consumption could be summarised in the following diagram:

Graph 5.15: Company A Consumption Sequence Potential Jack Pots



One possible reason for this pattern can also be found in the social trend which Spain experiences. First, the acquisition of Car Insurance relates to the necessity of a household where, usually, both adults work. It can either replace the main car or for the second driver of the parental circle. Second car insurance refers to the fact that, normally, a child's first car is acquired by parents soon after their son/daughter obtains their driving licence. Due to the high cost of insuring a car when under the age of 25, the first policy is usually purchased in the father/mother's name. The reason for parents taking out the insurance is because, in Spain, the high rates of fatal accidents involving young people (18-25 years) makes it quite expensive for this group to obtain car insurance. One way to overcome this situation is through putting one of the progenitors as the habitual driver, and the son/daughter as an occasional driver. In that way, both are covered and the cost is lower. As a result, consumption moves into the acquisition of retirement plans for the more mature customers of this group (Graph 5.17).

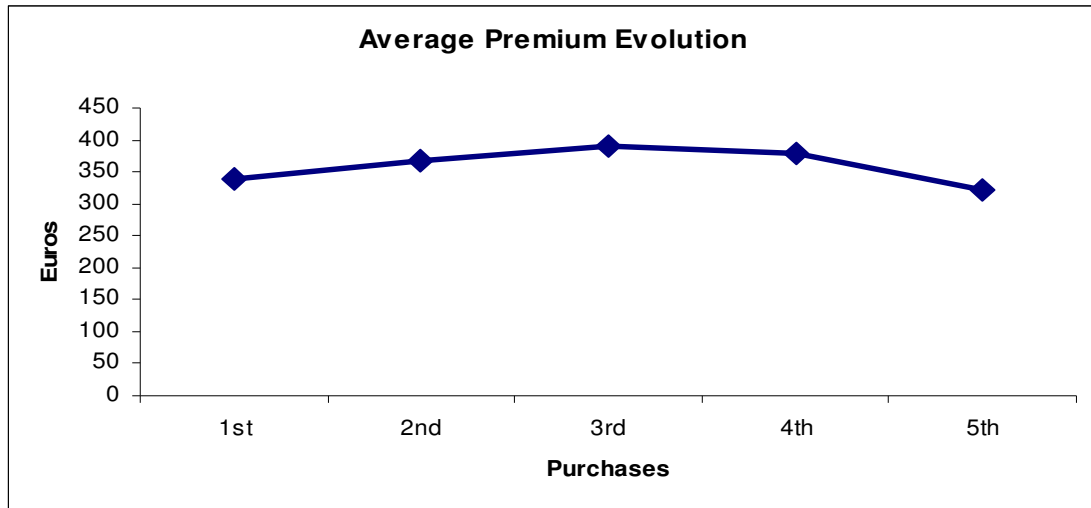
Graph 5.17: Company A Product Consumption Evolution Potential Jack Pots



Following on from the social realities of this group of financially mature customers and their income, premiums (Graph 5.18) show a positive evolution according to their professional improvements. In that way, starting from an average premium of around 350€, premiums slowly increase between the first and fourth purchase. After

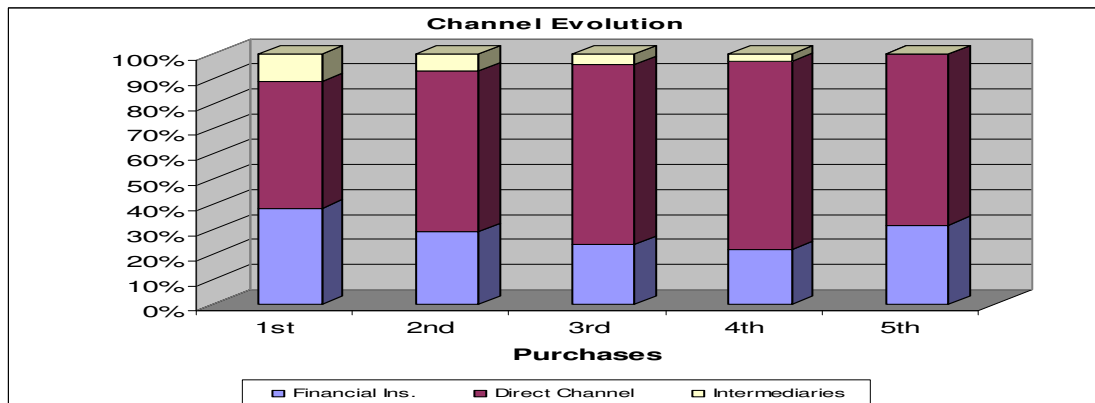
that, and coinciding with the acquisition of Savings policies, premiums present a slight drop which remains steady throughout the rest of the purchases.

Graph 5.18: Company A Premium Evolution Potential Jack Pots



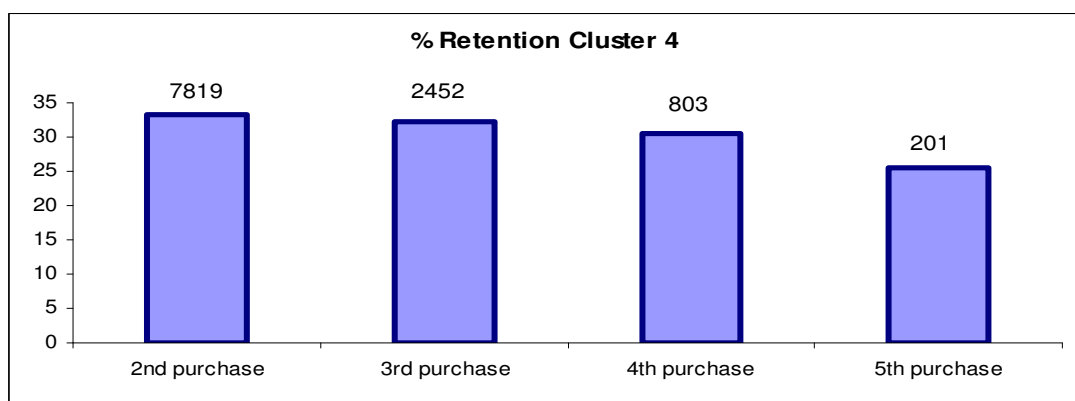
An analysis of the channel (Graph 5.19) reveals a preference for DC which remains the most used channel through all the purchases. The main reason for this evolution is because, traditionally, Car Insurance Policies have been negotiated through the DC. Finally, it could be highlighted that Intermediaries, once again, have merely a “significant” presence (11%) in the first purchase, which continuously decreases until it disappears. However, this presence of around 11% is the highest amongst the four clusters as Car Insurance Policies have been the most relevant product to give to Intermediaries across the Spanish national territory.

Graph 5.19: Company A Channel Analysis Potential Jack Pots



The final cluster's repurchase (Active Retention) figures (Graph 5.20) have some special features. Firstly, the overall repurchase ratio is quite high across all of the purchases (33%, 32%, 30%,25%), which shows a certain commitment between Potential Jack Pots and Company A. Secondly, the main drop in repurchase behaviour does not occur until after the first repurchase, as observed before, but after the fourth acquisition. In this situation, the main emphasis should be put on increasing the retention rate after the first purchase and to keep promoting the apparent loyalty which exists after that.

Graph 5.20: Company A Active Retention Potential Jack Pots



This segment also offers some business opportunities to Company A. On one side, it is the segment with a high consumption rate. Moreover, the age of its members implies a financial maturity where high value purchases are expected to be achieved (principal car, secondary car). Together with this, their professional activity (White Collar) suggests high salaries which are targets for sophisticated or high-value policies. These opportunities could be translated into up-grading or up-selling the conditions of their Car Insurance by offering special packages and by approaching them with sophisticated investments or savings products to prepare for their future and to take advantage of their last working years. If Potential Jack Pots are managed in the appropriate way and that potential is translated into real terms, the profitability of this group could increase until it reaches the top of the table.



### 5.3 Generic Cross-selling strategy or tailored Cross-selling strategies?

The Methodology Chapter presented three main hypotheses to be tested in the case studies. After addressing research questions one and two in the previous chapter, there is only question three to focus on. As it was stated in the methodological exposition, this remaining question concerns itself with defining either an overall cross-selling strategy for respondents, or on the other hand, as many cross-selling strategies such as clusters are identified for each case company. Before going any further with the development of the Who-What-When framework, it is necessary to test research question three, which was refined into a two questions:

*Do Cross-selling strategies have to be shaped by taking into account who is buying, what he/she buys and when he/she buys? Therefore, is the Who-What-When framework applicable in the financial services industry?*

The first question will be partially tested using the  $X^2$  Homogeneity Test applied to the consumption patterns of the four clusters. The hypothesis associated with the test is:

*$H_{o1}$ : The four clusters have the same consumption pattern across the five purchases*

*$H_a$ : There are some differences in the consumption patterns of the clusters across the five purchases.*

To build the test, the proportions of products (Car insurance, Home insurance, Risk, Savings and Accidents policies), at each purchase (first, second, third and fourth), were calculated and then tested to find out whether they were homogeneous. As a result of the test, the  $X^2$  value was 14,932.11 with a p-value of 0.000. Therefore, the hypothesis ( $H_{o1}$ ) that the four clusters have the same consumption pattern across five purchases can be rejected<sup>36</sup>. The figures have been summarised on table 5.4

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<sup>36</sup> At 90%, 95% and 99% confidence levels.

Table 5.4:  $X^2$  value for Hypothesis Ho<sub>1</sub>

T.Stat = 14932.11154    D.F.(# Cl.-1)= 3				
Significance	$X^2$ (90%)	$X^2$ (95%)	$X^2$ (99%)	$X^2$ (99.9%)
$X^2$ Value	6.251	7.82	11.35	16.27
Decision	Reject	Reject	Reject	Reject

As a result of this analysis, it was concluded that using the Who-What-When framework to define a common cross-selling and up-selling strategy for all the clusters identified in Company A, is not adequate. Therefore, the differences in consumption observed in the clusters, suggests the definition of tailored cross-selling and up-selling strategies for each group. This decision answers partially to Research Question Three and, as a consequence, each segment of customers from Company A will have an individual cross-selling and up-selling strategy.

After testing that the consumption features of each group differ enough to justify deploying an individual cross-selling strategy. The next question regarding the third research question, is whether, within each segment, the strategy developed is valid as the number of products acquired increases. If there was a generic cross-selling and up-selling strategy independent of the number of products acquired, it would mean that the probability of acquiring each policy (Car, Home, Risk, Accidents and Savings) remains constant over time, independently of whether it is the first, second or fifth purchase. From a common sense point of view, it seems clear that consumer needs change and, as a result, there should be a change in that probability of acquiring different policy types. One way to address the question of constant purchase probability over time, is by assessing the suitability of the Markov Chain Process. The Markov Chain Process is a stochastic process with a finite number of states (policy type acquired in purchase one, two, three, four and five), in which the probability of the occurrence of a future state is conditional only upon the current state. Past states are inconsequential; therefore probabilities remain constant around the initial figure (Allenby and Lenk, 1994). This suitability will be based on testing

the two main conditions necessary to fit that process. The conditions for establishing whether a process fits into a Markov Chain Model are:

- a) No order zero: this means that there is a dependency between the state in  $t+1$  and the state in  $t$ .
- b) Stationarity: states that the dependency between states remains constant.

To test the first condition, the test is as follows<sup>37</sup>.

*Condition 1: The types of policy acquired are independent from the previous type*

The  $X^2$  values to test this condition<sup>38</sup> are for each cluster and each purchase having a p-value<sup>39</sup>, in every single case, smaller than 0.05 (the significance level), therefore the condition of independence has to be rejected. This means that there is significant dependency between the policy type acquired at any purchase, and the previous one. This result allows for proving the first of the conditions from the Markov Chain Model.

The second condition (Stationarity) centres on proving that the transition probability remains constant across different periods. The idea is that the decision to buy a type of policy not only depends on previous purchases, but also that it is the same probability across all the stages (purchases). Condition 2 is as follows:

*Condition 2: Product Purchase decision is homogeneous across different time periods*

Looking at the p-values<sup>40</sup> obtained for each cluster and purchase<sup>41</sup>, the condition of stationarity cannot be accepted. This means that, as purchases occur, the probability

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<sup>37</sup> The analysis of Risky Youth and Mature Milk Cows is limited to two and three purchases respectively due to the low repurchase ratios for prospect purchases, which makes the calculation inappropriate, due to the number of cells with zero as their frequency.

<sup>38</sup> The condition has been tested using contingency tables, where policy consumption in time<sub>t</sub> was displayed in the rows, and policy consumption in time<sub>t+1</sub> in the columns. This table was conducted for each cluster including all the products.

<sup>39</sup> See Appendix 3, Section 2

<sup>40</sup> The condition has been tested using contingency tables, where the proportion of each type of policy was displayed in the rows, and the purchase number was displayed in the columns. This table was conducted for each cluster including all the products.

of the type of policy acquired (transition probability) changes. This conclusion goes together with the Customer Life Cycle theory. Actually, it seems obvious that, for example, the probability of acquiring Pension Plans is higher when customers are in their late 50's, than when customers are in their 20's.

Rejecting the condition of stationarity implies that the use of Markov Chain Models is not adequate in order to predict a unique set of probabilities to explain cross-selling and up-selling opportunities. To summarise, these results have attempted to apply the Markov Chain Process to explain policy repurchase probabilities over time. The first of the Markovian conditions about independence upon the previous purchase has proved satisfactory. However, the second condition of stationarity has been rejected; therefore, product repurchase probabilities depend on what customers bought in the previous acquisition, but this probability changes as consumption evolves. As both conditions are not satisfied, the use of The Markov Chain Process is not appropriated. Although the Markov Chain Process was not suitable, there are other methods of calculating repurchase probabilities for each purchase, as it is crucial to design cross-selling and up-selling strategies.

To summarise, this section has successfully answered to Research Question Three which stated that a generic cross-selling and up-selling strategy is not suitable for the entire customer database of Company A. As a result, the consumption features of each segment are significantly different, requesting a specific strategy to predict consumption in the future. In addition to this, not only do different clusters have different patterns, but also the acquisition of another policy depends on the type of policy acquired previously. Finally, the probability of acquiring a determined policy changes, depending on whether customers have bought one, two, three or four products. All this suggests that cross-selling and up-selling opportunities should be tailored to the customer's characteristics, to the kind of products acquired previously, and to the total number of policies acquired from Company A.

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<sup>41</sup> See Appendix 3, section 3

#### 5.4 The “WHAT” Analysis for Risky Youth

The profile of this cluster is young people (around 26 year old) who have a low consumption (1.4 products) and have a short relationship with the company (less than 2 years), and the lowest premiums (around 300€). Their consumption usually starts with the acquisition of Risk/Life Insurance (46.56%).

With regards to the Risky Youth consumption pattern, they present a clear preference for the FI channel, which mainly negotiates around 60% of all their policies. The popularity of the FI presents an issue for Company A. The problem is that when a company “depends on an intermediary to deal with its customers, all the retention strategies become more difficult” (Market Research Manager, Company A, December 2005).

Secondly, although the average premiums paid are the lowest of the four clusters, they present a positive evolution until the fifth purchase. The reason for that is that: (1) these customers do not usually present a high expenditure power as they are at the beginning of their professional life; and (2) the policies acquired (mainly Risk/Life) act as ‘completing’ policies for car insurance and home insurance policies. The relationship between car insurance and Risk/Life relies on the fact that “*the coverage of car insurance policies in cases of death is quite low, around 3,000€. Usually insurance companies recommend the acquisition of life/risk insurance to satisfy those covering deficiencies*” (Company A’s Market Research Manager, May 2006). In the same way, Risk/Life Insurance is linked to the acquisition of home insurance because “*when FI customers contract to a mortgage, they are “offered” the ability to also purchase the Home Insurance Policy and the Risk/Life Policy. Usually, when a mortgage is paid back by both parties, the acquisition of a Risk/life Policy is very wise. The Financial Institution will appear as a beneficiary (together with another member), to keep paying back the mortgage in case of death of the principal party. This is a protection system for both parties: the Financial Institution ensures the mortgage payments whatever happens, and the family is protected in case of the death of one of the principals, without losing their homes*” (Market Research Manager, Company A, July 2006).

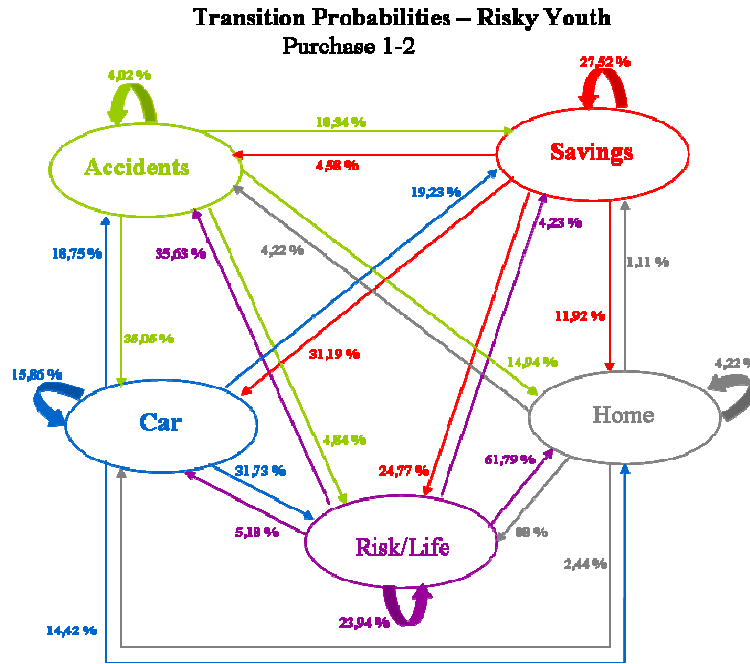
Relationships between Home Insurance and Car Insurance policies have also been reflected in the transition matrix<sup>42</sup> (Graphs 5.21i and 5.21ii)). This graph summarises the inter-product relationships existing between the first and the second purchases. It can be observed that from Risk/Life policies the main repurchase probabilities go to Home Insurance and Accidents. This final policy may have the main protection cover, but in this case, it covers any incident, apart from death. Moreover, the inter-connection between Car Insurance and Risk/Life is reflected here with a high probability of contracting a life insurance after buying a car policy. The last observation that should be made refers to the relationship between Accidents Policies and Car Insurance Policies. Due to the high risk of insuring young drivers, insurance companies do not tend to focus their sales on vehicle policies for this target. As a result, the premiums were too expensive. One way agents have found in which to soften the resistance of a company to negotiate Car Insurance to young customers, is by offering them another product. When a company looks at the records of the customer, if he/she already has another policy with the company, then there is a “green light” for the car insurance policy (Marketing Director, Company A, June 2006). Usually, the other product may happen to be Accidents or Risk/life policy, which is a cheap product that young customers can afford, and they may obtain a reasonably priced car insurance policy. From the chart it can be seen that the probability of acquiring car insurance after an Accidents policy is almost 0.4, the highest that comes from Accidents.

The analysis of prospective consumption proves, again, this inter-connection between Accidents, Home Insurance and Risk/Life policies (Graph 5.22 ii). Actually, customers who bought, during the second purchase, Home Insurance, have around a 0.6 probability of contracting a Risk/Life Policy in another purchase. In this way, customers who selected an Accidents Policy as a second purchase, tend to acquire Risk/Life Policies on the third purchase, with a probability of 0.61. Finally, the acquisition of Risk/Life Policies tends to move towards Home insurance in a future purchase, with a probability close to 0.4.

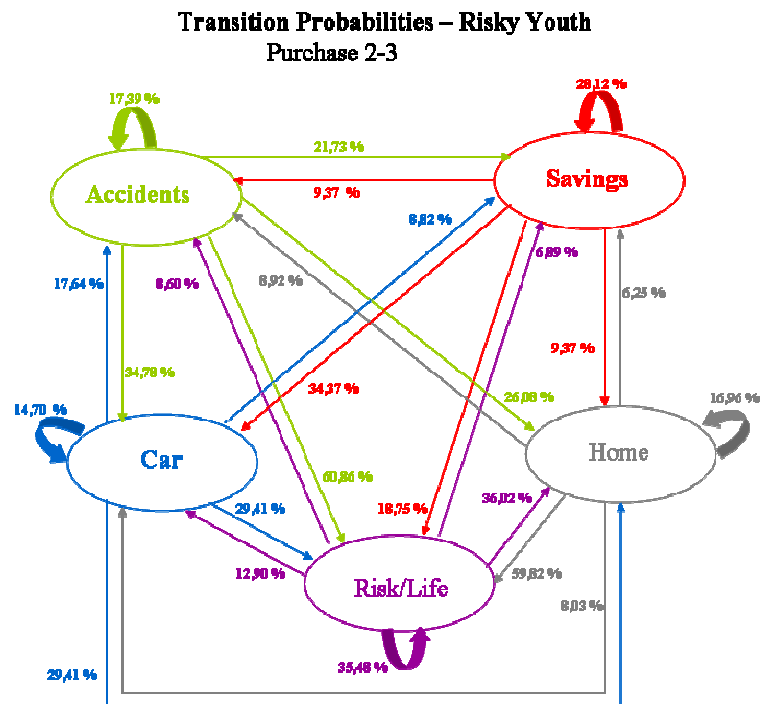
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<sup>42</sup> Probabilities on the graph will be expressed as percentage.

Graph 5.21i: Company A Transition Graph Risky Youth<sup>43</sup>



Graph 5.21ii: Company A Transition Graph Risky Youth

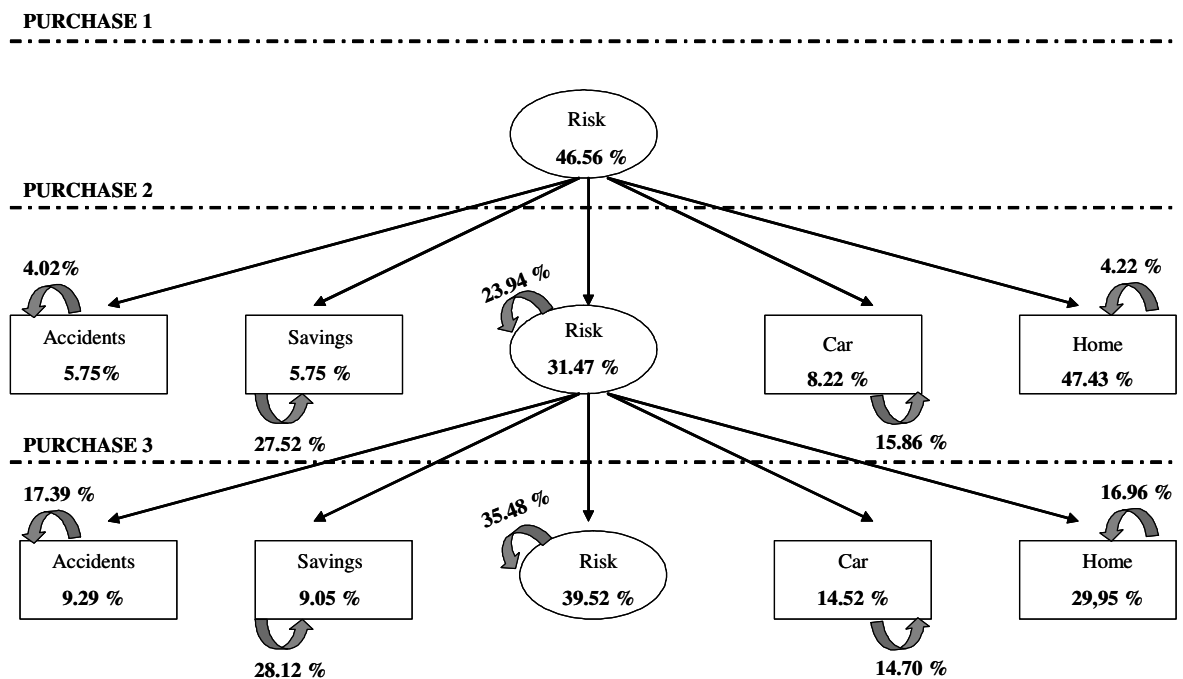


<sup>43</sup> The Transition Graph represents the five product types of Company A. Depending on what product customers acquire on the first purchase, the graph displays the probabilities (expressed as percentages) of acquiring on the next purchase, the other four products (straight arrow lines) in order to identify cross-selling opportunities. The revolving arrows indicate the probability of acquiring the same product on the next purchase. This was used to discover up-selling opportunities.

A good way to summarise all inter-connections and the purchase sequence of Risky Youth is by using Purchase Trees (Graph 5.22),<sup>44</sup> covering the evolution of this cluster's consumption<sup>45</sup> up to the fifth purchase. It seems clear that the predominant role played by Risk/Life policies in this cluster, also have the highest up-selling or up-grading probabilities. Once again, it can be verified that there is an underlying connection between Risk/Life Insurance and Home Insurance. This product seems to offer a clear cross-selling opportunity, as it is the most popular product in the second purchase, and remains second best at the third purchase.

Graph 5.22 Company A Purchase Tree Risky Youth

Purchase Tree for Cluster 1: Risky Youth



According to Graph 5.5, it could be concluded that Repurchase (Active Retention) is quite low. Actually, between the first and the second purchase, just 26% of

<sup>44</sup> The product in the ellipses is the predominant policy acquired on the first purchase (the trunk). The products in boxes represent cross-selling opportunities with their probability of purchase expressed in percentage (the branches). The recursive arrows represent the up-selling probabilities for each policy.

<sup>45</sup> The analysis has been restricted to three purchases due to the fact that the average consumption of this cluster is 1.4 products.



customers actively buy a second policy. This figure reduces even more, after the second and third purchases. This negative trend might be related to the problems mentioned before about using intermediaries and a low scope to deal, face-to-face, with customers in order to have closer contact and understanding. Additionally, this decline could be as a consequence of Risk Youth making the transition into the second cluster: Family Projects. The figures relating to age and product consumption seem to support the idea of a transition between groups. In this case, by the time Risky Youth moves towards the acquisition of a Home Insurance policy, usually attached to the purchase of a property, they are in their early 30s, which equates to the age of Family Projects contracting their first policy: Home insurance. A proper understanding of the impact of both reasons is crucial for Company A to either start a new approach strategy using the Direct Channel, or to improve segmentation objectives with a clear idea of when transition occurs and how it affects consumption.

For the purpose of understanding repurchase, Logistic Regression Technique has been run<sup>46</sup>. As it was described in Chapter Three, Logistic Regression is a technique used when the dependent variable is not continuous; in this case it is a binary variable with two possible values: '1', meaning that the individual buys another product, and '0', meaning that he/she does not. In this research, Repurchase 1.2<sup>47</sup> has been used as the dependent variable and both socio-demographic (age, marital status, occupation, region, age at the start of the first purchase) and consumption variables (first policy, length of the relationship, channel and value), are used as covariates<sup>48</sup>. The final model could be written as follows<sup>49</sup>:

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<sup>46</sup> Logistic Regression is a variation of the General Linear Regression Model, used when the dependent variable is not continuous. In this case, it is Repurchase: a second product policy has or has not been bought.

<sup>47</sup> Rep 12 repurchase between first and second purchases coded as 1= repurchase, 0= no repurchase

<sup>48</sup> The introduction of covariates has been carried out using the Stepwise Method, where the most relevant variables stay whilst the least significant are removed from the model, one by one). Therefore, we could say that the desired shape of the graph should have large boxes on the diagonal (frequency of expected value 1= frequency of observed of value 1, and frequency of expected value 0 = frequency of expected value 0).

<sup>49</sup> For individual coefficient validity values, see Appendix 3, Section 8.

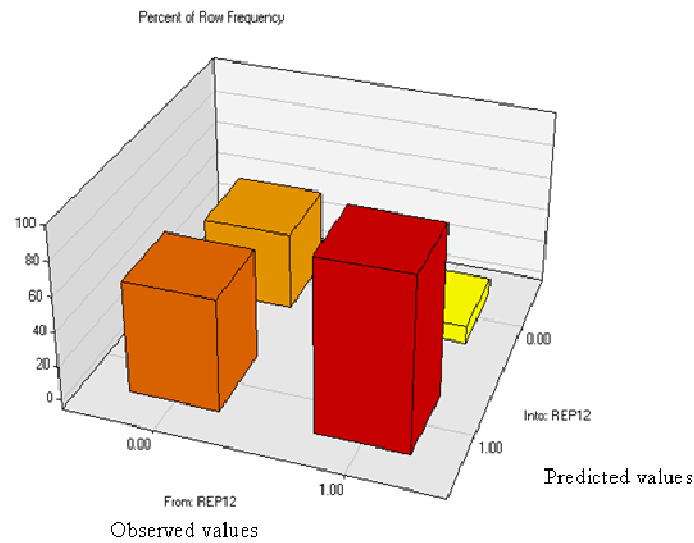
$$\begin{aligned} \text{Logit (P(Rep}_{12}|\text{Risky Youth}))} &= 0.61 \text{ FI (1)} - 0.45 \text{ Age} + 20.8 \text{ Life at Company} \\ &+ 16.032 \text{ Prod1:Accidents} + 16.20 \text{ Prod1: Home} + 17.05 \text{ Risk} - 0.56 \text{ Nickel} - 15.98 \text{ Bronze} \\ &+ 36.02 \text{ Gold} \end{aligned}$$

(Equation 5.1)

From Equation 5.1, it can be concluded that, with the exception of Age, the factors featuring the relationship between Company A and its customers (first product purchased, the channel, the length of the relationship or the profitability rank) have a primary impact on repurchase. Moreover, Age has a negative effect. This means that as customers get older, the repurchase probability reduces. This may be the consequence of customers moving towards Family Projects.

In terms of the validity of the model, one of the tools that can be used to assess this is Graph 5.23, which measures the prediction power of the model by displaying the percentages of correct and incorrect predictions. A close look at the graph shows a good result for the prediction power of the model when trying to explain Repurchase (almost 80% of re-purchasers were correctly predicted). However, the “No repurchase” seems to be less precise as about 40% of customers who did not repurchase, were correctly predicted. Therefore, the model is good at predicting repurchase, but it tends to fail when predicting no repurchase behaviour. In order to solve this problem, more data on non-active buyers should be included, to give a better picture of the situation.

Graph 5. 23 Company A Predictive Strength Risky Youth



Another way of assessing the validity of the model is by looking at the results obtained in the training, validation and test samples. The research strategy of randomly splitting the data into three sets is not only used to assess the validity of the results, but also to test their stability. The results remain similar across the three sets<sup>50</sup>. Moreover, the overall degree of misclassification of the model is 23%, therefore, the conclusion is that the model correctly predicts around 77% of cases. Finally, SAS Enterprise Miner® shows the overall goodness of fit of the model with the Likelihood Ratio having a p-value <0.001. Therefore, the hypothesis that all the covariates are zero, can be confidently rejected (Table 5.5).

Table 5.5 Company A Goodness of Fit Logistic Regression, Risky Youth

Likelihood Ratio	d.f.	P-value
20943.377	16	<0.0001

Once the validity of the analysis has been proved, the next step is to understand repurchase introducing the influence of time. Using Cox’s Regression Technique,

<sup>50</sup> See Appendix 3, Section 4

repurchase between purchases one and two is modelled by taking into consideration time's effect. The model uses Repurchase (1= Repurchase, 0= No Repurchase) as dependent variables which will be explained, again, by all the socio-economic and purchase behaviour variables, with the difference being the time which has passed between purchases, is included in the model. The model's results are expressed in the following (Equation 5.2<sup>51</sup>).

$$\text{LHR}(\text{Rep}_{12}|\text{Risky Youth})(t) = -0.138 \text{ Age} + 0.021 \text{ Product Risk} - 0.064 \text{ Financial Institution} + 0.317 \text{ Length of Relationship} + 0.052 \text{ Profitability}$$

(Equation 5.2)

The validation of this model is based on looking, again, at the likelihood (Table 5.6) of the ratio providing a way to assess whether the covariates introduced into the model are statistically significant. In this case, the likelihood of the final model has a p-value smaller than 0.0001. This means that there is a high degree of confidence in the results provided by the model

Table 5.6: Company A Goodness of Fit Cox Regression, Risky Youth

	Value	p value
-2 Log-likelihood Ratio	346718.58	<0.0001

Once again, the results show how socio-demographic variables have a minimum impact on modelling repurchase. Actually, only Current Age seems to have an impact on it, and it has a negative sign. This means that, the older that Risky Youth are, the smaller the repurchase probability is. Therefore, if Company A wants to increase the likelihood of cross-selling and up-selling opportunities, an early attraction of this group of customers could be a sound strategy. Apart from that, it could be observed that purchase behaviour variables appear to influence the repurchase decision more. In line with the results obtained from Logistic Regression, the previous policy, together with its channel, is introduced into the final model with

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<sup>51</sup> For individual coefficient validity values, see Appendix 3, Section 8.

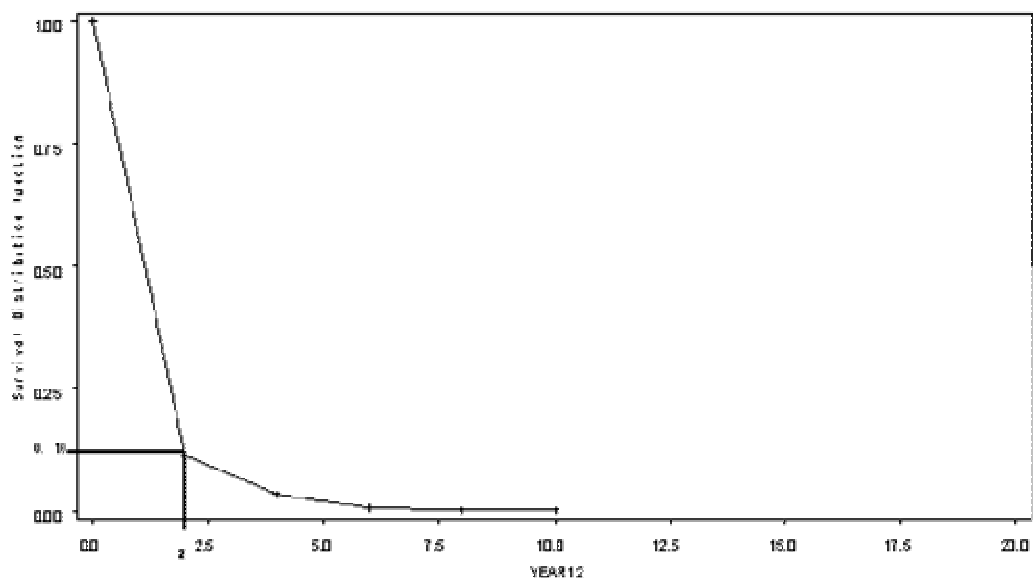
the length of the relationship (Life with Company) and individual customers' profitability. These results show that the recommendations would go together with paying a higher degree of attention to all the factors surrounding the experience that Risky Youth have with the company, in order to fulfil Risky Youth's needs.

### 5.5 The "WHEN" analysis for Risky Youth

The final part, Survival Analysis, consists of understanding the influence of time on the decision of Risky Youth to repurchase a second policy. In order to tackle this question, the output used will be Survival Curves. They show how the repurchase probability changes, as time goes by. Graph 5.24, displays the Survival Curve resulting from the model explained above for Risky Youth, between purchase one and purchase two measured in years.

From this, the conclusion is that the Repurchase decision of Risky Youth to contract a second policy occurs sometime within two years after the purchase of the first policy (90% customers acquiring a second policy do so in a period shorter than two years). More specifically, 50% of the repurchase decision is made within a period of time of just one year after the acquisition of the first policy. This result clearly suggests the relevance of contacting Risky Youth, quickly, with tailored offers, when they are still more likely to respond to them.

Graph 5.24: Company A Time Analysis Risky Youth



## 5.6 The “WHAT” Analysis for Family Projects

The second cluster identified is Family Projects, which accounts for 57% of the customers' database. Basically, it represents customers in their late 30's who started their relationship with the company about five years ago, when in their mid 30's. They are mainly married and clearly involved in the services industry, in the region of Guipúzcoa. Their consumption profiles show the highest consumption ratio with an average of around two products, which are acquired through a combination of different channels.

The most appealing product for this group is Home Insurance, which they contract through the Financial Institution Channel<sup>52</sup>, with an average premium of 500€. Again, the issue relating to the consumption of Family Projects is the acquisition channel. As happened with Risky Youth, this cluster also prefers the Financial Institution, and negotiates mortgage offers in the same way as Home Insurance. After the first policy, Family Projects present a change and tends towards the Direct Channel, which might suggest an approximation towards Company A.

According to the Consumption Evolution Graph (Graph 5.7), it seems clear from the acquisition of Home Insurance that consumption moves towards Risk/Life Insurance. On the third purchase, the most popular product is Car Insurance, which continues to lead in consumption, until the final purchase when Savings becomes the most acquired product after a growth progression (from 5% in the first purchase, up to 30% in the fifth purchase).

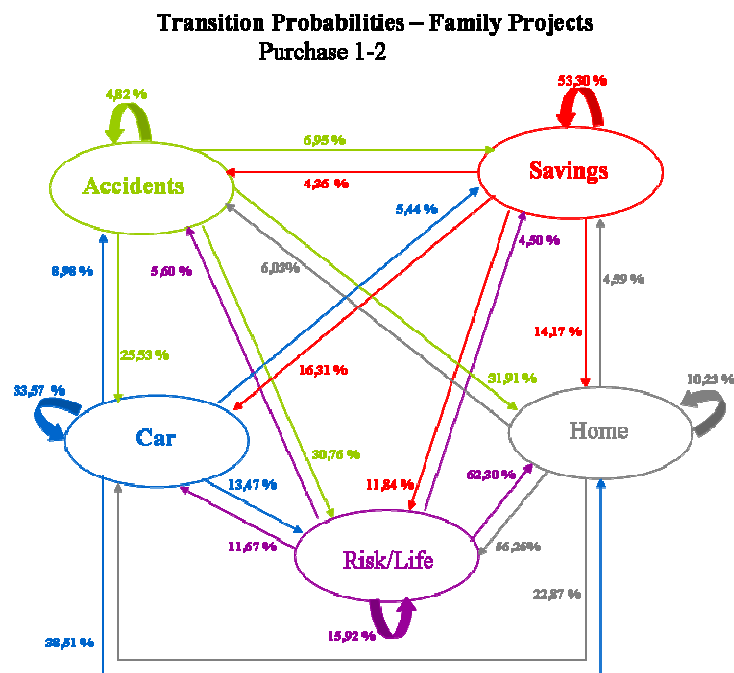
On inspection of the Transition Probabilities for Family Projects (Graph 5.25i and 5.25ii), it shows a clear inter-connection between Car Insurance and Home Insurance, which are the most acquired products of the first two purchases. It could also be remarked upon that there is an inter-relationship between Accidents Insurance and Car Insurance, as explained in the previous section. Apart from those cross-selling inter-connections, some up-selling opportunities can be spotted, mainly

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<sup>52</sup> probably included in the mortgage pack

in Savings Insurance where 54% of purchases in the second acquisition, come from customers who bought Savings previously. This figure, along with the positive evolution of Savings, proves a clear concern in Family Projects about the future. This opens doors to begin designing specific saving/investment plans for their future retirement.

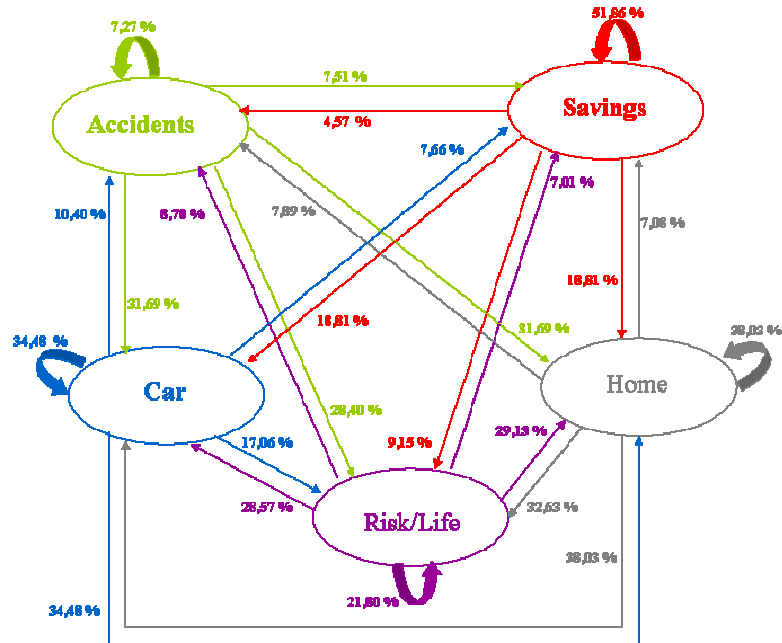
Graph 5.25i: Company A Transition Graph Family Projects



The Transition Graph of Family Projects between the second and third purchase (Graph 5.25ii), again, shows a close inter-relationship between Car Insurance and Home Insurance, which happens to be the most represented alternatives to purchase. Moreover, as expected due to the presence of Home Insurance, there is a significant number of Risk/Life Policies. It could be said that the lower part of the graph displays the most attractive cross-selling opportunities (Car Insurance, Home Insurance and Risk/Life Insurance) and some of the clearest up-selling chances associated, again, to Car and Home Insurance. In line with up-selling, Savings Policies suggest obvious up-grading activities for those customers orientated towards preparing for their retirement.

5.25ii: Company A Transition Graph Family Projects

Transition Probabilities – Family Projects  
Purchase 2,3

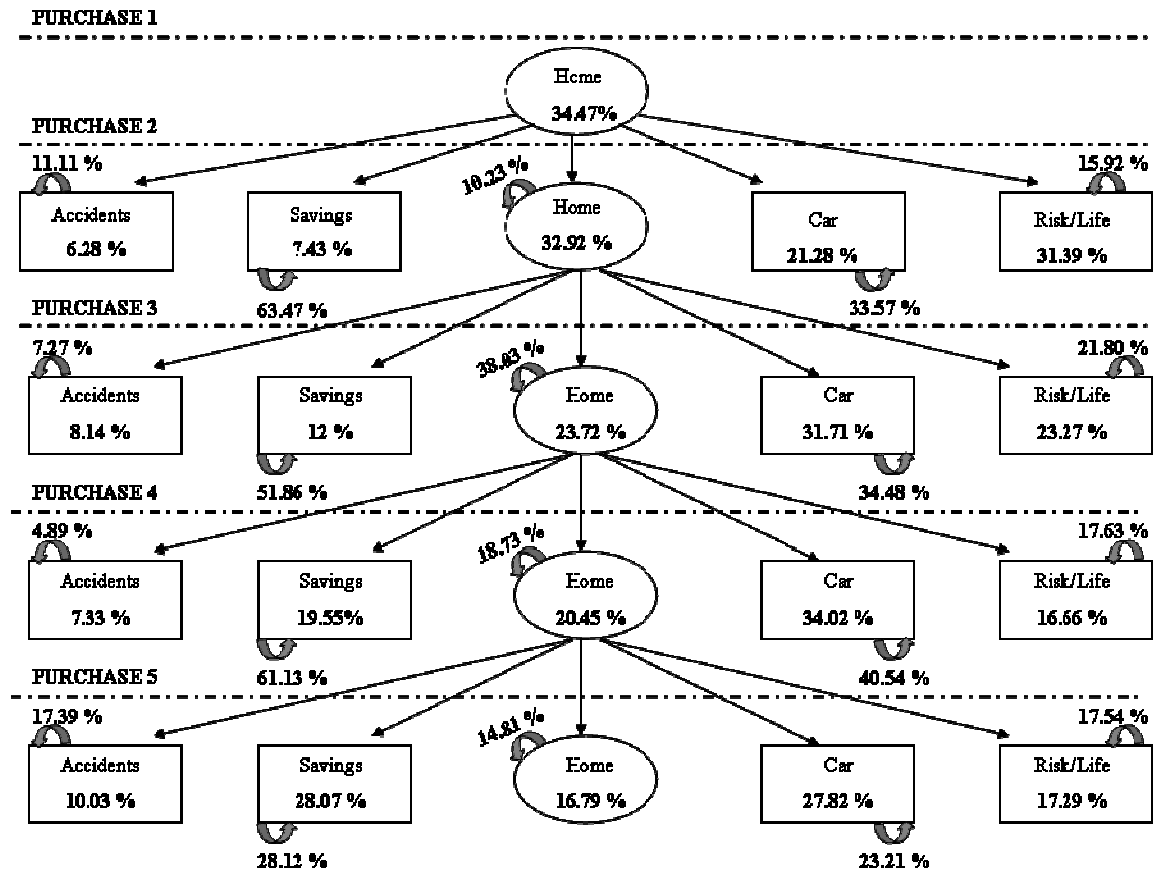


The final part in the analysis of the consumption of Family Projects consists of looking at the Purchase Tree (Graph 5.26). The tree clearly shows a continuous decline in the acquisition of Home Insurance, which ends up on the fifth purchase with one of the lowest acquisition probabilities. On the other hand, Car Insurance experiences an opposite pattern with a clear growth, which allows taking the lead on the third and fourth purchases to reduce its weight on the fifth purchase.

Furthermore, Car Insurance offers clear up-selling opportunities with high repurchase figures. According to the graph, there is a subsidiary product for Family/Projects which are Accidents Policies. It maintains a constant purchase probability of around 10%. Finally, Savings is a policy which presents a continuous growth: from a low 7% in the first purchase, it is the most acquired policy at the fifth purchase, with high up-grading opportunities.



Graph 5.26: Company A Purchase Tree Family Projects



After the consumption analysis, the analysis of repurchase figures (Graph 5.11) determined where the bigger challenges for repurchase are. It seems fairly clear that the repurchase of Family Projects is higher than that of Risky Youth, as around 37% of customers acquire a second policy. However, after that, just 25% seem to select Company A as their insurance provider, whose figures remain quite stable, until the last purchase. Using Logistic Regression, the variables with an impact on the repurchase decision has been estimated and summarised in equation 5.3<sup>53</sup>

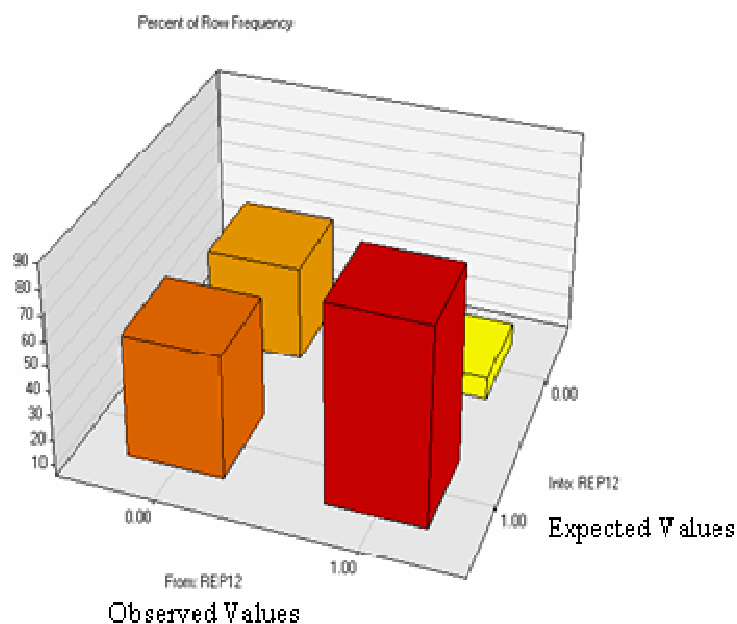
$$\text{Logit}(P(\text{Rep}_{12}|\text{Family Projects})) = 0.5372 \text{ FI} - 0.0063 \text{ DC} - 0.097 \text{ Age} + 3.89 \text{ Life with Company} + 1.20 \text{ Prod1:Accidents} + 1.44 \text{ Prod1: Savings} - 0.77 \text{ Prod1:Home} + 1.43 \text{ Prod1:Risk} - 1.73 \text{ Nickel} - 1.09 \text{ Bronze} - 1.19 \text{ Silver} + 0.53 \text{ Gold} + 2.63 \text{ Platinum}$$

<sup>53</sup> For individual coefficient validity values, see Appendix 3, Section 8.

A close analysis of the Equation suggests that the impact of the previous channel, clearly biased towards the Financial Institution (FI) over the Direct Channel (DC). Apart from that, the life with the company has a clear view on the repurchase behaviour, without serious differences on the coefficients for the different time periods. Following the impact of previous purchases, the policy acquired first is also introduced in the model, with Savings offering stronger opportunities. In terms of profitability, it seems clear that almost all the categories are represented, with bigger or smaller impact. However, Platinum customers are predicted to be the most likely to repurchase another product. Finally, once again, it was observed that Age is the only socio-demographic variable with a place in the model. Actually, the negative sign of its coefficient suggests that the older the customers, the less likely they are to buy.

Graph 5.26, gives an idea of the power of the model to correctly predict repurchase. The model is not completely accurate, as only 40% of “No repurchase” customer were correctly predicted by the model. However, it performs quite well on predicting repurchase, in fact, around 80% of the predictions of Re-purchasers are correct.

Graph 5.27 Company A Predictive Strength Family Projects



An analysis of the three samples<sup>54</sup> also concludes the validity of the results as they are very similar in each of the three sets. Another interesting piece of information provided by SAS Enterprise Miner®, is the misclassification rate, 30%, which suggests the percentage of customers whose purchasing behaviour has been incorrectly predicted. Therefore, 70% of the predictions are correct. Even if it is not perfect, this accurate measurement is high enough to fulfil the objectives of this research. Finally, the Likelihood Ratio proves once more, the validity of the model with a very confident significance level.

Table 5.7 Company A Goodness of Fit of Logistic Regression Family Projects

Likelihood Ratio	d.f.	P-value
29851.94	19	<0.0001

In order to understand repurchase behaviour a bit better, the objective now is to predict repurchase by taking into account the influence of time, using Cox Regression. Equation 5.<sup>55</sup>4 suggests similar results to the previous one. Again, Age has a negative impact which means that the older customers are less likely to repurchase, and Life with the Company and Profitability have positive coefficients which suggest that the longer the relationship with the company, and the higher that customers are located in the profitability program, the higher the probability of repurchase.

$$\text{LHR}(\text{Rep}_{12}|\text{Family Projects})(t) = -0.005 \text{ Age} + 0.236 \text{ Length of Relationship} \\ + 0.06 \text{ Profitability}$$

(Equation 5.4)

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<sup>54</sup> See Appendix 3, Section 5

<sup>55</sup> For individual coefficient validity values, see Appendix 3, Section 8.

In order to validate the results (Table 5.8), the log-likelihood has been assessed. It has a p-value smaller than 0.0001, which clearly satisfies the significance level, therefore, there is a high level of confidence in the results generated by the model.

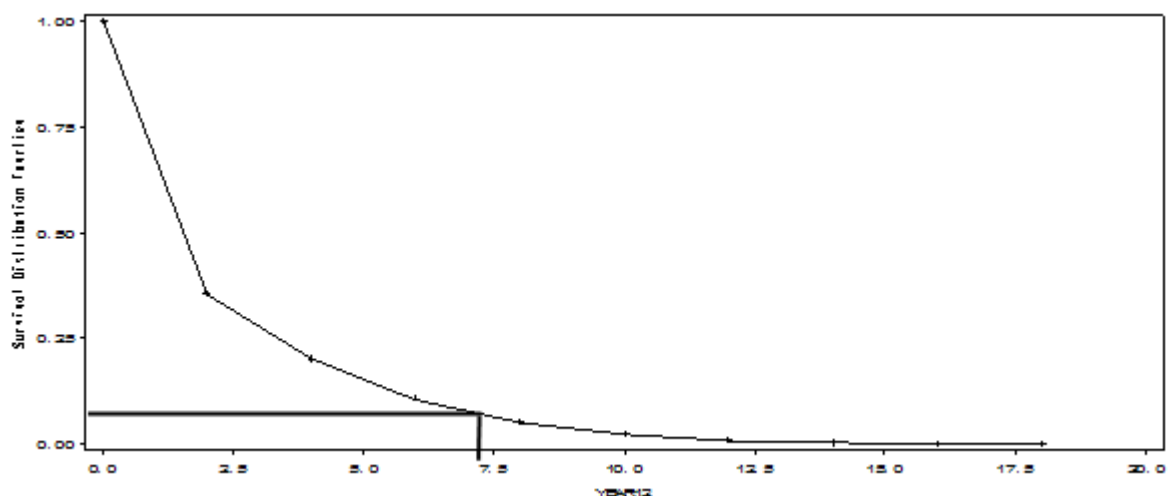
Table 5.8: Company A Goodness of Fit Cox Regression Family Projects

	Value	P value
-2 Log-likelihood Ratio	346718.58	<0.0001

### 5.7 The “WHEN” Analysis for Family Projects

Finally, the survival curve (Graph 5.28) displays interesting results about how time has an effect on repurchase. Firstly, the repurchase decision spreads over a long period of time, 17.5 years. Secondly, around 70% of customers repurchasing have made the decision within two years of the previous policy. It clearly shows the relevance of keeping the relationship, with customers, alive shortly after the first purchase, offering them the products which will suit their needs the most. However, this repurchase behaviour occurs quicker than in the previous cluster, as the decision is made at a faster rate. It can be observed by the way that the survival curve drops, the Family Projects’s curve is smoother (with a lower slope) in the different sections which clearly shows a slower decision process. Actually, at the same probability level, 90% of customers have repurchased within 7.5 years after the first purchase.

Graph 5.28: Company A Time Analysis Family Projects



### **5.8 The “WHAT” analysis for Mature Milk Cows**

The third cluster identified in the database of Company A has been Mature Milk Cows which accounts for a quarter of the data set. Here, customers are characterised as being mature. They are in their mid 70's and, as expected, they are already married and retired. In terms of their consumption features, Mature Milk Cows have been customers for over ten years which suggests that these customers started their relationship with the company when they were in their 60's. However, Milk Cows only consume 1.35 products with a high Premium of around 800€, which happens to be the highest found. These customers do not seem to be loyal to one channel for different products, as they select different channels. The label is as a result of a few reasons. First, they are customers of quite an advanced age. Second, this cluster offers clear business opportunities as they have been with the company for a long period of time, which may suggest an established relationship. Moreover, the high premiums they are paying, suggests high attractiveness for the group.

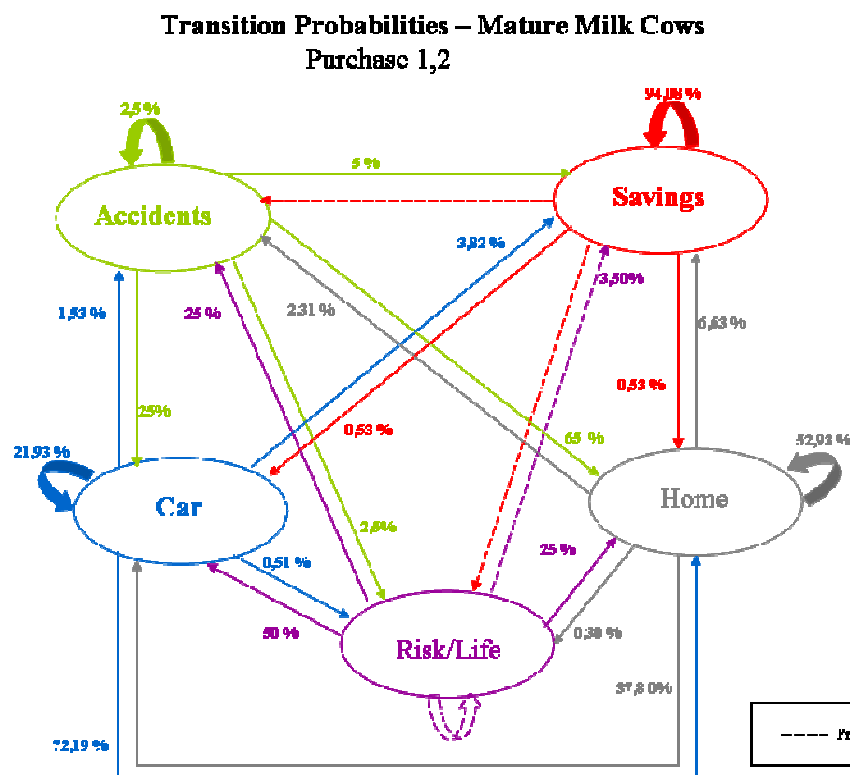
Because of all of these characteristics, Mature Milk Cows could be a very profitable target for Company A, who could take advantage of the economical possibilities of customers who base the approaching strategy on the extensive relationship already existing between the customer and Company A. The only considerations to bear in mind are: (1) the fact that the mature customer's income should reduce steadily due to their age; and (2) the lack of loyalty to the channel.

Looking at the consumption (Graph 5.12), there is a continuous decline of Home Insurance while Savings increase their popularity in the portfolio. Together with this behaviour, Car Insurance also shows a continuous decline in its consumption and products like Risk/Life and Accidents Policies have a subsidiary presence in the basket with less than 5% of the consumption. Finally, the only product with a growing trend is Savings, which reaches a value close to 80% of all the purchases made by Mature Milk Cows, on the fifth purchase.

The Transition Graph (Graph 5.29) shows the inter-connections between products. Once again, it evidences a clear inter-relationship between Home Insurance and Risk

Insurance, and between Car Insurance and Accidents. However, due to the special features of this group of customers, some of the policies offer very few up-selling and cross-selling opportunities. Home Insurance offers this group up-selling opportunities and it is a clear cross-selling product for those customers who have acquired Car Insurance (the probability of buying a Home Insurance Policy after Car Insurance is 0.72). Focusing on up-selling, the clearest chances come from Home Insurance with an up-grading probability of 0.53, and from Savings policies, where 94% of customers have acquired Savings Insurance will buy it again.

Graph 5.29 Company A Transition Graph Mature Milk Cows

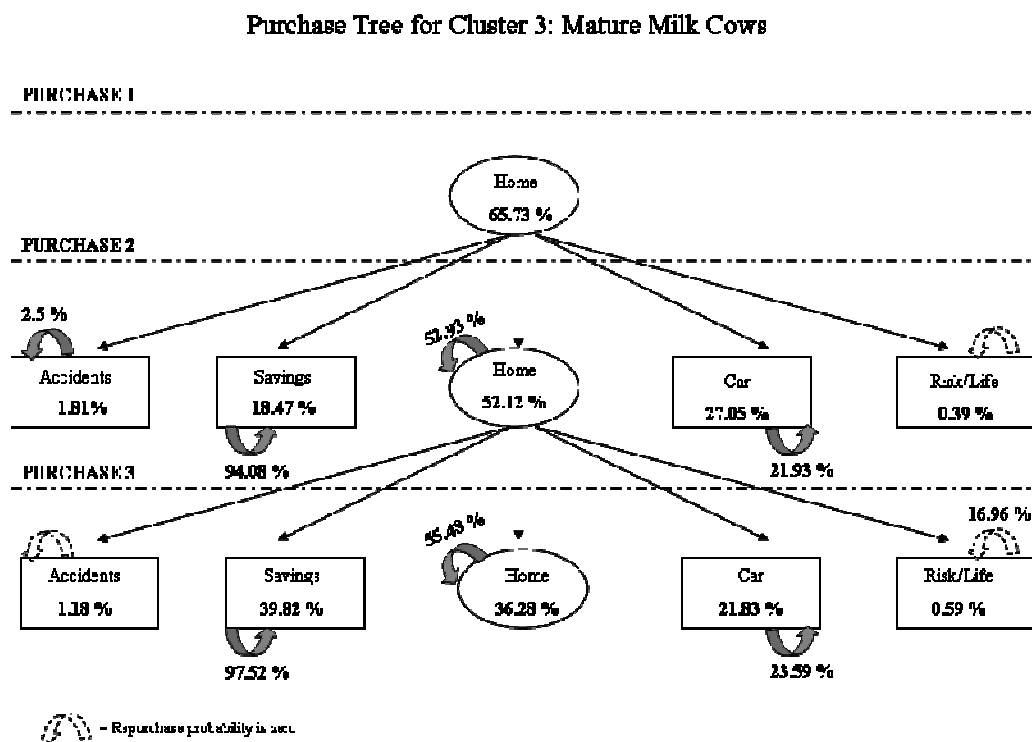


After this analysis, the objective now is to summarise the evolution of Mature Milk Cows' consumption on the Purchase Tree (Graph 5.30)<sup>56</sup>. In the root, and on the trunk of the tree, it can be observed that the decline process experienced by Home Insurance still has some opportunities arising from up-grading the policy. Following this path, but not so drastically, Car Insurance is mainly offering cross-selling opportunities. Other products like Accidents and Risk/Life Insurance, not only have

<sup>56</sup> In this case just three purchases have been displayed due to the low numbers of Mature Milk Cows going through purchase numbers four and five.

very low records of consumption, they cannot be considered as good “up-sellers” looking at their probabilities. Finally, the only product which really offers some opportunities is Savings Insurance, which not only increases its consumption across the purchases, but also generates more business opportunities from up-grading the existing policies.

Graph 5.30: Company A Purchase Tree Mature Milk Cows



The analysis of Repurchase for Mature Milk Cows (graph 5.15) shows a very distinctive pattern which is completely different from the other clusters. Firstly, the active retention figure after the first purchase is the lowest (20%), which means that 80% of these customers never continue onto the next purchase. Furthermore, and against all odds, the active retention figure increases after the second purchase to reach around 40% of customers acquiring another policy on the fifth purchase. This coincides with Savings Policies when they start taking the lead in the consumption for Mature Milk Cows. Therefore, it could be assumed that Savings is a policy that does not attract customers from the first purchase, however it is a product to ensure customers’ continuity given their needs.

Due to this peculiar behaviour, the understanding of the repurchase behaviour using Logistic Regression is going to be crucial in enabling Company A to understand the best way to tackle Mature Milk Cows.

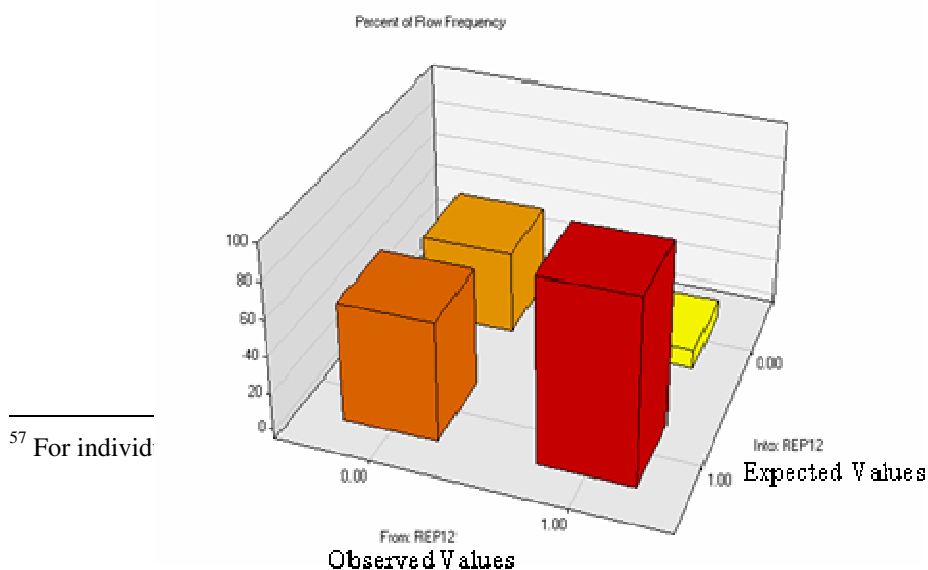
$$\text{Logit}(P(\text{Rep}_{12}|\text{Mature Milk Cows})) = -5.14 + 0.333 \text{ FI} + 0.6493 \text{ DC} + 0.0462 \text{ Starting Age} + 0.47 \text{ Nickel} - 0.82 \text{ Bronze} - 0.15 \text{ Silver} - 0.18 \text{ Gold} + 0.96 \text{ Platinum}$$

(Equation 5.5)

From the above equation (5.5<sup>57</sup>) the following conclusions can be drawn. Firstly, the channel of the first purchase has a clear impact on the repurchase decision. Moreover, Age has a negative impact as, again, older customers are less likely to buy an extra policy. However, the starting age has a positive impact which suggests that the younger the customers are when starting a relationship with Company A, the more likely Mature Milk Cows are in acquiring a second policy. Finally, the profitability value is also of the model, with the deepest impact associated to the Platinum band.

The prediction power of the model can be assessed by Graph 5.31. It shows, again, that the model slightly over-estimates the Repurchase decision. Basically, only 50% of the non-repurchasers have been predicted. On the other hand, the model performs quite well in predicting Repurchase. Here, it correctly allocates around 80% of Mature Milk Cows.

Graph 5.31 Company A Predictive Strength Mature Milk Cows





The last objective under the Logistic Regression Model is evaluating the validity of the model. As with the other clusters, the values of the three sub-samples remain quite similar<sup>58</sup>, which goes in favour of the validity of the test across the database. Moreover, the misclassification rate of an average value of 20% means that the model suggested a way to predict that repurchase behaviour performs correctly (makes the right prediction) 80% of the time. Also, Table 5.9 shows the Likelihood Ratio evaluation and how the p-value is less than 0.05, which suggests that the model is properly specified.

Table 5.9 Company A Goodness of Fit of Logistic Regression Mature Milk Cows

Likelihood Ratio	d.f.	p-value
25817.87	20	<0.0001

The objective now is to look at the repurchase prediction by taking into consideration the influence of the time lapse between purchases. From all the covariates introduced in the Cox Regression model, just three have been accepted. The final equation (Equation 5.<sup>59</sup>6) suggests that older customers are, less likely to acquire a second Policy from the company. Moreover, the sooner customers start acquiring policies from Company A, the more likely they are to keep buying more policies from it. Finally, it seems that the channel used to acquire the first policy and hopefully to keep the relationship with the customer alive, also has a positive influence on the repurchase decision. This final result has a big impact on the channel management strategy of the company. As mentioned before, Mature Milk Cows seem to prefer the Direct Channel for the acquisition of their first policy. Therefore, the direct interaction with Company A seems to be a valuable feature to invest in, in order to promote repurchase.

$$\text{LHR (Rep}_{12}|\text{Mature Milk Cows})(t) = -0.224 \text{ Age} + 0.245 \text{ Starting Age} + 0.273 \text{ Direct Channel}$$

(Equation 5.6)<sup>60</sup>

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<sup>58</sup> See Appendix 3, Section 6

<sup>59</sup> For individual coefficient validity values, see Appendix 3, Section 8.

<sup>60</sup> The coefficients of Age, Starting Age and Life with the firm might be affected by multicollinearity

The purpose for validating the model is similar to that obtained from Logistic Regression. The following table (Table 5.10) shows how the log-likelihood of the model has a p-value less than 0.0001. Therefore, the model is properly specified, as the covariates included are statistically significant.

Table 5.10: Company A Goodness of Fit Cox Regression, Mature Milk Cows

	Value	P value
(-2) Loglikelihood Ratio	15104.33	<0.0001

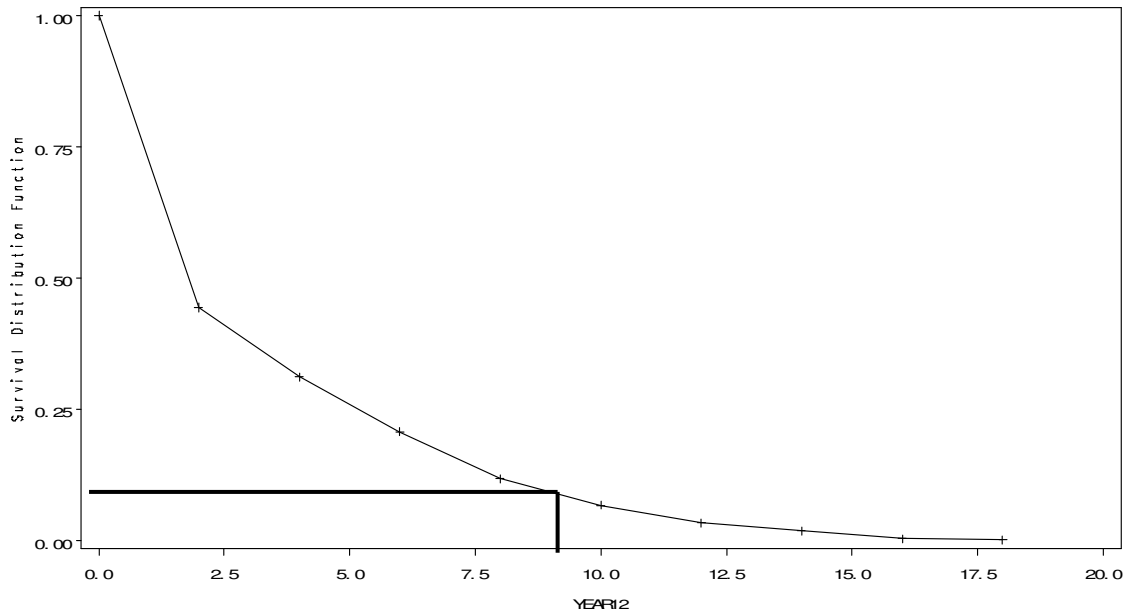
### **5.9 The “WHEN” Analysis for Mature Milk Cows**

Finally, Mature Milk Cows also show quite a particular repurchase timing which can be observed in the Survival Curve (Graph 5.32). Firstly, there is a period of time, which is relatively short, approximately two years where the repurchase decision occurs very quickly. Actually, around 60% of customers wishing to buy a second policy have done so, and 50% of Mature Milk Cows have acquired that new policy just 1.25 years after the first policy. Therefore, regarding the relevance of contacting customers in the short-term, for Mature Milk Cows this advice seems to be even more appropriate. After this ‘fast repurchase decision’ period, the curve slows down and, for example, over the next 2.5 years<sup>61</sup>, just 15% more customers have acquired a second policy. This process remains until the last Mature Milk Cow has acquired a second policy which “only” takes around 18 years from commencement of the relationship with the company.

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<sup>61</sup> a total of 5 years have gone from the first purchase

Graph 5.32: Company A Time Analysis Mature Milk Cows



### **5.10 The “WHAT” analysis for Potential Jack Pots**

The final cluster, called Potential Jack Pots, represents 19% of the customer base. As their main features, these customers are in their late 50's, are married and professionally occupied in the service sector (white collar). Mainly located in Vizcaya, the rest of Company A, where it has its major influence is, Potential Jack Pots, who have been part of the company for the last five years, as they were in their late 40's or early 50's. Moreover, in terms of consumption, we can identify the following characteristics. First, they only acquire 1.56 products. The “attraction policy” is Car Insurance which traditionally has been, and still is, a very interesting policy for Spanish insurance companies, due to the high margins associated with it (Marketing Director Company C, May 2006; Market Research Manager Company A, July 2006). The acquisition of that policy has been conducted through the Direct Channel, which is also the preferred option for the rest of the consumption. Not only has this cluster acquired quite a profitable product for the company, but also does so with a high premium policy of about 650€. The occupational activity, the value of the premium and the location, all suggest that this cluster has high economical possibilities.

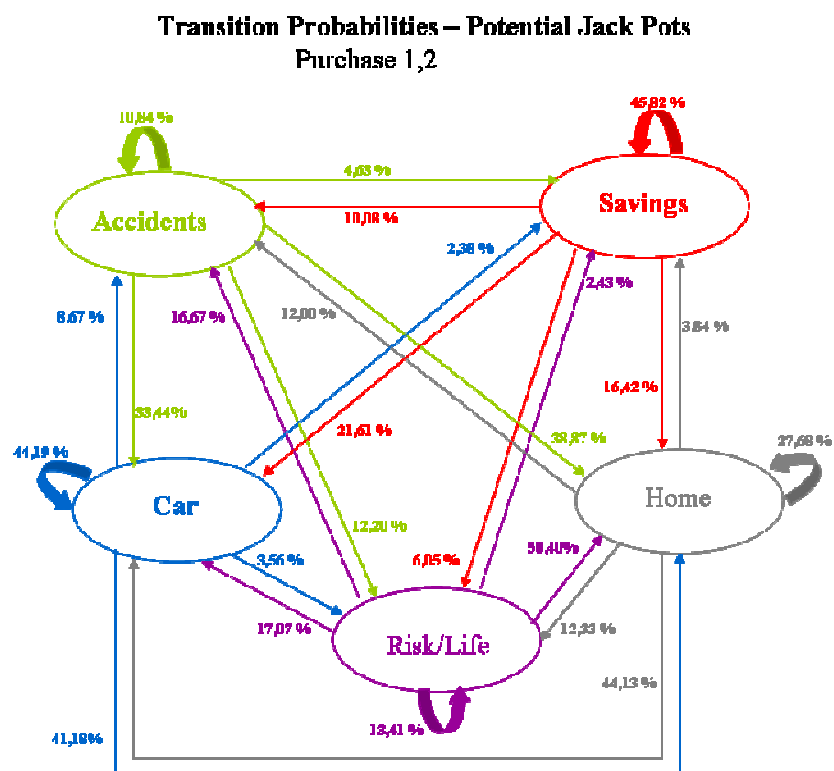
After identifying the main characteristics of Potential Jack Pots, the objective now is to understand their consumption behaviour (Graph 5.17). The first idea, which has already been mentioned, is the popularity of Car Insurance Policies. This product seems to lead to consumption of several purchases. This may be the result of Potential Jack Pots having been attracted to Company A, in the event of the purchase of a new car. However, this growth stops after the fourth purchase where Car Insurance is taken over by Savings Policies. Whilst Savings were presenting relatively low consumption during the initial purchases, it increased, exponentially, just before the fifth acquisition. Another product with a rapid negative progression is Home Insurance. While it was head-to-head with Car Insurance, at the beginning of Potential Jack Pots' consumption, Home Insurance declines over time through the five purchases. Once again, due to the fact that products like Car and Home Insurance reduce their presence in the basket, products which usually were pulled by them like Accidents and Risk/Life Policies also have a residual value with quite a flat pattern under 10% of the total consumption.

The Transition Matrix Graph (Graph 5.33) explores cross-selling opportunities offered by the two most popular products: Home and Car Insurance. Moreover, it has to be highlighted as the bi-directional sign of this relationship. In line with cross-selling, it could be said that a product like Accidents Policies, clearly lead consumers to acquire a Car Insurance with a probability of 0.33 and Home Insurance, with a 0.38. However, the relationship here is not bi-directional as, from car insurance holders, the probability of purchasing Accidents policies is just 0.08, whilst the same probability for home insurers is only 0.12. Another product with this uni-directional connection is Risk/Life Policies. After their purchase, one out of two customers purchase Home Insurance while, when the other way around, it is just 12.3%.

Focusing on up-selling opportunities instead, the first product to explore is Car Insurance which has a repurchase probability of 0.45. Apart from that, Savings Policies deserve a special analysis under the up-selling perspective. When looking at the probability of acquiring Savings, over any other product, they are quite low;

actually they do not reach to over 0.04. This means that Savings Policies on the second purchase mainly come from up-selling (46%). However, by the end of the fourth purchase, Savings Policies take the lead by becoming the most consumed product. From that, it can be concluded that Savings is an up-selling product at the beginning of the consumption life of Potential Jack Pots. As time goes by, Savings Policies become a popular purchase, therefore, Savings Policies are no longer pure, up-selling policies, but also a clear cross-selling opportunity.

Graph 5.33: Company A Transition Graph Potential Jack Pots



The next step is trying to summarise this net of inter-connections using the Purchase Tree. Graph 5.34 shows how Potential Jack Pots keep a steady consumption of products like Accidents and Risk/Life policies. Those products not only have a relatively low presence in the consumption basket, but their up-selling opportunities are relatively scarce.

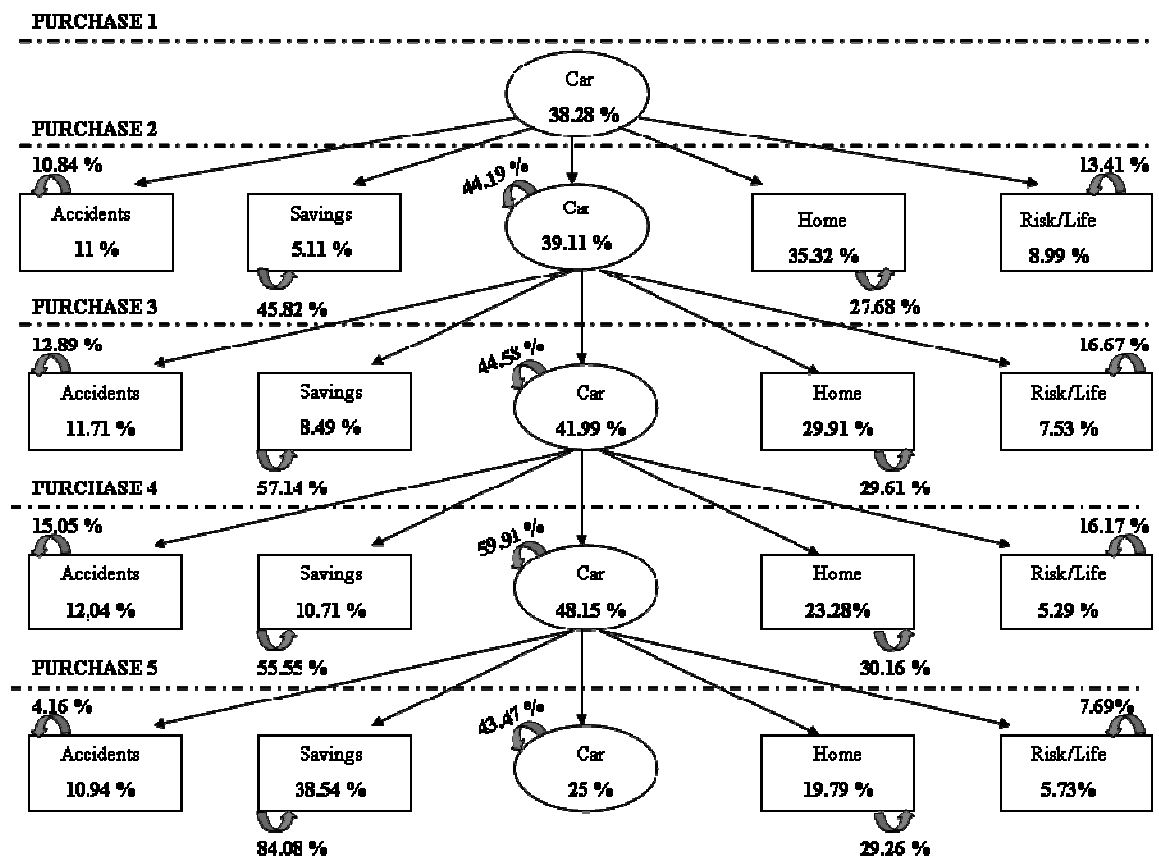
Together with these subsidiary products, Home Insurance stands as the second best option at the beginning of Potential Jack Pots' consumption. However after a

continuous negative pattern it goes down by less than 20% of the total consumption on the fifth purchase.

Car Insurance can be found on the trunk of the tree. It is a product with clear up-selling opportunities, which also suffers from a continuous drop in the number of consumers. Actually, from being the most acquired product with around 40% of all the sales on the first purchase, it ends up as the second option with just 25% behind Savings, on the fifth purchase.

Finally, what seemed to be a subsidiary product across the first purchases, strengthens its consumption on the final acquisitions to become, not only the most acquired product with almost 40% of the whole consumption, but also as a product with high loyalty ratios shown by the up-selling probability of 0.84.

Graph 5.34: Company A Purchase Tree Potential Jack Pots



Finally the analysis of repurchase (Graph 5.21), shows a completely different pattern from the other clusters. First, this group shows a relatively high active retention as around 34% of customers acquire a second policy. Furthermore, this “high” retention ratio remains around that level until the fifth purchase, where it drops to 25%. In conclusion, the challenge for Company A to retain Potential Jack Pots comes from: 1) increasing repurchase ratios to avoid missing around 60% of business opportunities; and 2) paying special attention to the transition between the fourth and the fifth purchases where the active retention figures fall.

The repurchase behaviour will be explored next, by using the Logistic Regression technique. After several attempts introducing and rejecting variables, the final model selected and tested is the following one (Equation 5.<sup>62</sup>7):

$$\text{Logit (P(Rep}_{12}|\text{Potential Jack Pots))} = 0.09 \text{ Starting Age} + 0.297 \text{ DC} - 0.068 \text{ Age} - 0.489 \text{ Silver} + 0.253 \text{ Gold} + 0.98 \text{ Platinum}$$

(Equation 5.7)<sup>63</sup>

From Equation 5.7, it could be concluded that, again, the age of customers has an impact on repurchase behaviour. Actually that impact is negative, which means that the older the customers, the less likely they are to acquire another policy from Company A. However, Starting Age works in the opposite way. Therefore, the younger the Potential Jack Pots are when then start their relationship with Company A, the more chances there are to increase their repurchase rates.

Apart from these demographic variables, the model introduces the effect of the channel used on the previous purchase, with a clear domain of Direct Channel. Moreover, the profitability associated with each customer clearly impacts on consumption behaviour. In this case, only the higher bands (silver, gold and platinum) customers are more likely to buy. Within those, a higher probability corresponds with the ‘Platinum’ Potential Jack Pots.

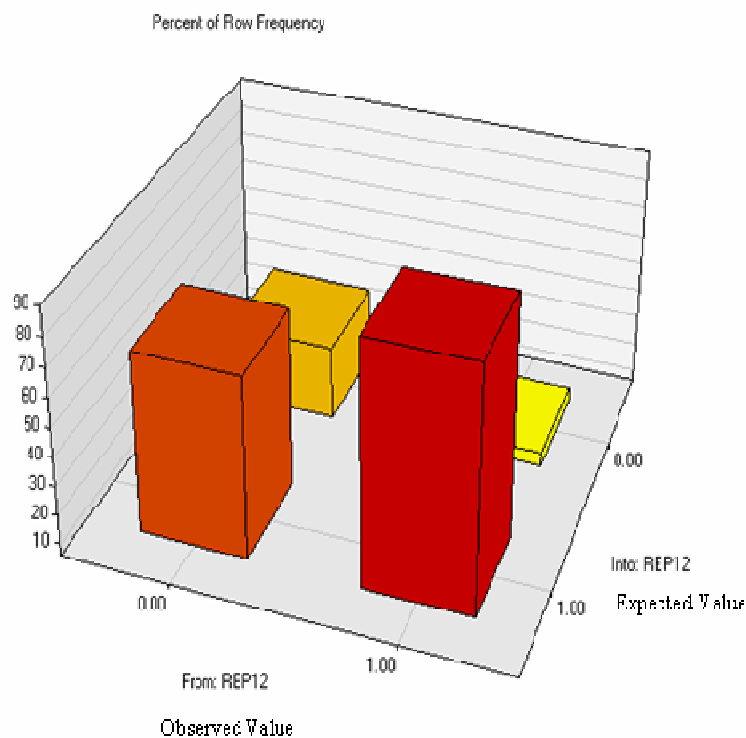
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<sup>62</sup> For individual coefficient validity values, see Appendix 3, Section 8.

<sup>63</sup> The coefficients of Age, Starting Age and Life with the firm might be affected by multicollinearity, due to the fact, that Life with the firm is a linear transformation of the other two.

The predictive power of the model is displayed in Graph 5.35. It clearly shows the same pattern that has been produced for previous clusters. The model is quite strong when trying to predict repurchase between purchases one and two for Potential Jack Pots, as around 80% of the expected repurchase finally takes place. However, the performance of the model is not as good at the prediction of “no repurchase”. Actually, the model predicts the correct behaviour on just 40% of cases. Still the repurchase prediction power seems high enough to validate the results; the lack of predicting accuracy for “no repurchase” suggests either improving the model, introducing more/other variables, or carrying out a separate analysis to try to understand “no repurchase behaviour”.

Graph 5.35 Company A Predictive Strength Potential Jack Pots



The results of the Training, Validation and Control Sample<sup>64</sup> are quite similar. The misclassification ratio shows a lack of precision of the model of around 29.9%. This means that the model correctly predicts the repurchase behaviour of 69% of Potential Jack Pots. To complete the validation of the Logistic Regression Model, the p-value

<sup>64</sup> See Appendix 3, Section 7



of the likelihood ratio (Table 5.11) is less than 0.05 (significance level), therefore it can be concluded that the model is correctly specified.

Table 5.11 Company A Goodness of Fit of Logistic Regression Potential Jack Pots

Likelihood Ratio	d.f.	p-value
16982.32	16	<0.0001

The same analysis on repurchase behaviour for Potential Jack Pots is now carried out, using Cox Regression to take into account the effect of time on the dependent variable. The model looks like this (Equation 5.8)<sup>65</sup>:

$$\text{LHR}(\text{Rep}_{12}|\text{Potential Jack Pots})(t) = -0.079 \text{ Age} + 0.084 \text{ Starting Age} - 0.163 \text{ Length of the relationship} + 0.0436 \text{ Profitability}$$

(Equation 5.8)<sup>66</sup>

From the model equation (5.8) the results obtained in the previous model have been confirmed. In this way, the impact of Age is negative again, and what supports the idea that the more mature Potential Jack Pots are, less likely they are to acquire a second policy. Moreover, the Starting Age is as positive as it was before to prove that the younger the customer, the more chance they have to increase their policies from Company A. Additionally, customer value suggests that the higher bands of the profitability scheme are the best targets for repurchasing purposes. The only difference between models comes from the substitution of ‘Channel 1’ for Life with the firm. In this case, the effect has a negative sign proposing the idea that the less time that Potential Jack Pots have been part of Company A, the more likely they are to respond to cross-selling and up-selling activities.

The validity of the model has been summarised in table 5.12, showing how the likelihood ratio has a p-value smaller than 0.0001, validating the correct definition of the model.

<sup>65</sup> For individual coefficient validity values, see Appendix 3, Section 8.

<sup>66</sup> The coefficients of this equation can be affected by multicollinearity.

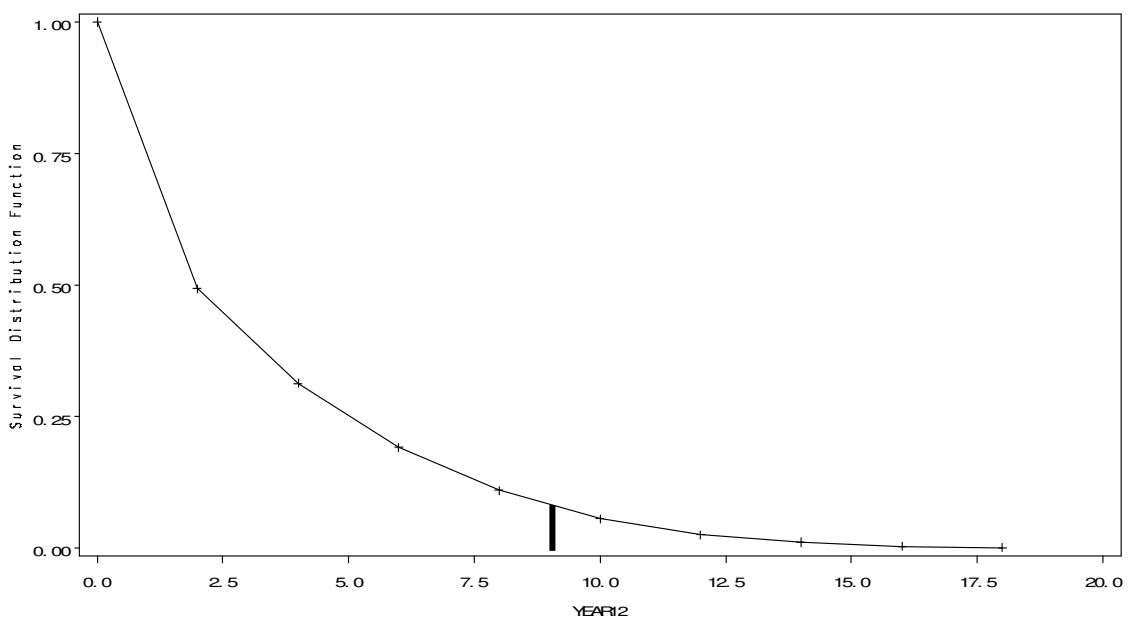
Table 5.12: Company A Goodness of Fit Cox Regression, Potential Jack Pots

	Value	p value
-(2)Loglikelihood Ratio	122436.86	<0.0001

### 5.11 The “WHEN” analysis for Potential Jack Pots

Finally, the objective is to investigate how repurchase decisions occur across time. The Survival Curve (Graph 5.36) shows how 50% of the second purchase happens within 2.5 years after the first acquisition. In opposition to Mature Milk Cows, Potential Jack Pots take longer to make the repurchase decision, so Company A has longer to contact and approach them. Although, after this initial section, where repurchase happens very fast, the survival curve is smooth again, Company A does not have to wait as long as before, in order to get 90% of the second purchase as it seems to happen within 8 years (with a total period of 10 years from the first purchase). Finally, it takes around 18 years to get the last “re-purchaser” to acquire a second policy.

Graph 5.36: Company A Time Analysis Potential Jack Pots



## **Conclusion**

This Chapter has displayed the application of the Who-What-When framework on the customers' data base provided by Company A, in order to discover Cross-Selling and Up-Selling opportunities. The first step consisted of segmenting the data base to discover groups of customers who could receive a common retention strategy. After several attempts, the final solution has compiled four clusters with significant differences in their socio-demographic features and in their consumption behaviour. These groups have been labelled as Risky Youth, Family Projects, Mature Milk Cows and Potential Jack Pots. After the segmentation analysis, the next step was concerned with approaching Research Question Three. This suggested the need for running a specific cross-selling strategy and validates the WHAT and WHEN analysis for each cluster, as the consumption differences amongst them were significant enough to present a common approach to the four groups. Research Question Three has been successfully addressed using a double approach: Homogeneity Test and Markov Chain Process. As a result of those tests, it has been concluded that different clusters have different consumption patterns, where future policies depend on current consumption and that the probability of acquiring one or another policy, changes over time. The consequence of these conclusions has been the development of a tailored cross-selling and up-selling analysis for each cluster. The last sections of the chapter have been a deeper investigation into WHAT the members of the customer segments are more likely to acquire next, with a clear emphasis on product inter-connections and policy purchases probabilities. In the investigation of WHAT, some time has been spent on modelling the repurchase decision by using Logistic and Cox Regression Methods. Therefore, the most influencing factors on the repurchase decision have been validated. While some results presented similarities across the clusters (age and length of relationship with the company), others presented special features depending on the cluster analysed (channel, value and first policy). The final stage for each cluster has focused on determining the time horizon, when those policy acquisitions were more likely to occur (WHEN). As a result, there are clusters where repurchase happens very quickly (Mature Milk Cows), but others, take longer to make their repurchase

decision (Risky Youth). To sum up, the chapter has identified who and how customers from Company A purchase, what products they are more likely to buy next, and finally, when those purchases have a higher chance of happening.

This chapter has only represented an application and the analytical results obtained from applying the Who-What-When framework. A proper articulation of those results in specific retention strategies for each segment in Company A, will be presented in the Results Chapter (Chapter 8) where no figures, graphs and other validity measurements will simplify the understanding of the proposed retention strategies. Before discussing the results, the next two chapters will introduce the second case study: Company B. First, Chapter 6 will attempt to understand the UK building societies industry and then address research questions one and two around the relevance within the industry of customer retention and the evaluation of cross-selling as an attractive strategy for building societies. In Chapter 7, a similar application of the WHO-WHAT-WHEN framework will be deployed for Company B and also the third research question will be addressed in order to determine whether a common cross-selling strategy would be sufficient for this company, or whether tailored ones would be more suitable (research question three).

## **Chapter six**

### **Case Study Two Company B:**

### **Customer Retention & Cross-selling in the UK Building Society Industry.**

### **Qualitative Research**

## Introduction

This Chapter begins with the second case study: Case Study B. The introduction of this second company coincides with the application of the qualitative approach in order to address research questions one (customer retention value) and two (cross-selling as a retention strategy), but now in the UK Building Society industry. As previously carried out with Company A, the objective of this chapter is to understand the conditions under which Company B operates. Hence, the first section describes the main features of the UK's financial services providers in general, but with a special emphasis on the characteristics of Building Societies. After understanding the features, the next step will attempt to address Research question one in relation to the relevance of customer retention in the Building Society industry. Research question two will follow, where cross-selling strategies will be assessed in the context of this UK industry. Those two questions will be answered by using material obtained from the qualitative research strategy developed for Company B, Company D and the Building Societies Association in the UK. This research was conducted over a period of two years when several face to face interviews were organised with the participants. A summary of those contacts has been displayed on table 6.1.

Table 6.1 List of respondents Case Study two

Case Study Two: UK Building Society Industry	
<b>Company B:</b>	
	<b>Date</b>
Executive Director	January 2005, September 2005, May 2006, June 2006, September 2006, February 2007
Business Development Director	September 2005, January 2006, September 2006
IT Services Manager	June 2005
<b>Building Societies Association</b>	
	<b>Date</b>
Research Director	December 2006
PR Manager	November 2006, December 2006
<b>Company D:</b>	
	<b>Date</b>
Marketing Director	October 2006, November 2006, December 2006

The beginning of this chapter explains the conditions of the UK financial services and Building Society industry. These conditions have a clear impact on the competitive conditions of the market and the strategies followed by its players. After evaluating the main features of the industry, it describes the main features of Company B, which help to understand its strategy and position towards customer retention and cross-selling. Section two addresses the relevance of Customer Retention as part of the Relationship Marketing and CRM concepts (research question one). This assessment has been obtained from views gathered through a number of interviews with several firms (Company B and Company D as key players in the industry and Building Societies Association acting as the insurance national body). The third section consists of evaluating the concepts of cross-selling as a possible strategy which Spanish insurance providers should consider for their future survival in the market (research question two).

### **6.1 UK financial services industry :**

Since the end of the 1970s, the UK's financial services industry has been subjected to an unprecedented scale of de-regulation. The interventionist policies of the previous decade had dominated business decisions across the economy generally and especially within the financial services arena. This relaxation started in 1979 with the abolition of UK foreign exchange controls, followed by the removal of restrictions on domestic bank lending (Nellis and Lockhart, 1995).

Those actions had a clear impact on the business structure of the financial industry as the scope of the activities was no longer limited to specific financial organisations. The freedom of lending allowed retail banks to move into other businesses like the profitable UK mortgage market, which had been traditionally dominated by Building Societies. Over the last few decades decades, Building Societies have also broadened their activities to include: unsecured loans (e.g. Woolwich); overdrafts (e.g. Nationwide); travellers' cheques (Alliance & Leicester) amongst others; activities traditionally associated with financial institutions, such as, banks and insurance companies (Don Cowell, 1990).

In 1981, the Bank of England relaxed its intervention in respect of the control of interest rates. A year later, the remaining hire purchases controls and other regulation over Building Societies were removed, opening up access to wholesale funds and the sterling Eurobond market (in 1983). As a result, at the end of the 80's, UK financial services had gone through a process of liberalisation that brought into the industry increasing competitive pressures (Glass and McKillop, 2000).

This liberalised climate had impact on the industry by opening the doors to increasing competition. As a result, traditional players (banks, building societies and insurance companies) enlarged their offers by introducing new products in their portfolio. Moreover, new entrants (Sainsbury, the Post Office, Tesco, etc.) have seen opportunities in this industry and started to offer their own financial products, increasing competition and dynamism in the sector. From the consumer's side, as mentioned before, consumers of financial products are becoming more sophisticated and informed, demanding more value for their money and better service.

#### 6.1.1. Building Societies' Special Features

Before addressing the Building Society industry, there are some special characteristics of these organisations which need to be highlighted, given the impact that they have on the *modus operandi*. Building societies are mutual companies. A mutual organisation, can be briefly described as an organisation that does not have a residual claimant in the form of an "investor", non-customer shareholder (Tayler, 2003). "Building Societies are mutual organisations. They are owned by their members rather than by shareholders" (Marketing Manager Company D, Nov 2006). A Building Society is defined by legislation as having two distinctive factors, in comparison with other Financial Institution: 1. a business model based on products like savings and mortgages and 2. is the ownership model, Building Societies are not owned by shareholders, but by clients who are called members. What is important is that every customer owns, equally, the Building Society despite the value of their account. This interaction and involvement with customers is what under-pins the difference compared with other Financial Institutions. The responsibility of the customer is what matters for Building Societies (Building Societies Association, Dec



2006). Using a metaphor, the best way to define this is using the image of a club. The members (i.e. the customers) are the people who are in the club (Executive Director Company B, February 2007).

As their names suggest, Building Societies were originally set up by groups of individuals to help build properties for the members. Therefore, savings and investment accounts are simply a means to accumulate enough finance to carry out that building work. The primary service offered is the mortgage<sup>67</sup>, however, in order to have enough resources to lend money, Building Societies have to attract resources (funds) from other borrowers, under the form of savings and investment. The objective is borrowing money from savers to lend it to mortgage holders.

### 6.1.2 Overview of the UK Building Societies Industry

Because of the deregulation, UK Building Societies were strongly affected. Prior to the new environment, Building Societies were highly specialised firms with a dominant position in the UK market for mortgage and savings products. Following the Building Societies Act, 1986, Building Societies were permitted to diversify into more traditional banking activities (Wright and Watkins, 1987; Speed, 1990; Hammond and Thwaites, 2000), but banks were also allowed to move into traditional Building Societies' products, which increased the pressure to improve productivity, cost efficiency and profitability at all levels. All these pressures resulted in several strategies surviving. On one hand, there has been, and still is, a merging process going on by which small and medium Building Societies united to get the benefits of becoming a bigger player<sup>68</sup>. The history of Building Societies since 1900 has been characterised by mergers (transfer of engagements) (Tayler, 2005). Whilst economic theory suggests that, up to a certain point, an increase in size results in economies of scale, therefore, there are some doubts as to whether or not Building Societies mergers actually achieve economies of scale (Barners, 1985, Watkins and Wright, 1986). The effects of mergers on the image of participant societies can be seen from

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<sup>67</sup> A loan secured against the property for which the loan is intended.

<sup>68</sup> In 1986 there were 167 Building Societies, by the end of 1993, that number has dropped to 84 (McKillop and Ferguson, 1993) and today, the Building Societies Associations accounts for 63 members (Building Societies Association Annual Report, 2005).

two perspectives: increase in size and change in identity. In terms of size, a small society is associated with a limited range of services, but a more personal service. It is the medium sized societies whose images are least defined. While the growth of medium and large societies could have a positive impact on image resulting from associations of size, the growth of smaller societies, via merger, could damage consumer perceptions of their personal service (Cowell, 1990). An alternative strategy for societies to achieve economies of scale would be to enter joint ventures with other societies and/or financial institutions to reduce costs by centralising services or to improve customer service by adding extra value to their offers.

On the other hand, some of the biggest Building Societies decided to become PLC (or were acquired by other financial institutions) during the demutualisation process in the 1990's (Abbey National, Halifax) (The All-Party Parliamentary Group for Building Societies & Financial Mutuals, March 2003). Harrison (2000) has identified several drivers promoting the demutualisation process experience in the 1990's. Competition reasoning suggests that the financial market was over-supplied with new competitors that customers were considered more flexible and innovative. Moreover, there has been a lack of understanding on what the concept of "mutuality", means with vague perceptions of the benefits which derived from it. Due to the fact that customers had to be compensated (economically) for the loss of their rights after the demutualisation, many customers were seduced by short-term benefits associated to the process. In addition to these, efficiency and control became less exercised in Building Societies by managers, due to the ownership model which spreads control and responsibility over a broader range of members who were more or less informed about the affairs of the organisation. Finally and probably most significantly, Building Societies depend upon growth and expansion depends on retained earning of a limited number of members. However, capital access can be easily increased by becoming a PLC and issuing shares (Ferguson and McKillop, 1992).

The final strategy adopted has been becoming 'local players' with clear market niches to focus on. This strategy is based on understanding the differentiating

features of Building Societies and promoting them in order to provide a completely distinguishable personality from other similar financial services providers. “These differentiating features can be related to customer characteristics (i.e. focusing on mature customers), to service peculiarities (i.e. offering personal financial advice), to regional character (i.e. serving customers in rural locations), to social implications (i.e. promoting the development of the community) or a combination of them” (Marketing Director, Company D, November 2006).

Directly from new legislation, Building Societies were forced to review their strategies to maintain greater market freedom. However, Building Societies had little experience of the new conditions of the markets that they were facing. Previous competition has been between societies, and controlled by the Building Society Association (Cowell, 1990). In addition, customers have been relatively unsophisticated and comparatively loyal, therefore, Building Societies were focused on supply factors (cost and technology), rather than on the demand side (customer needs). The major environmental changes which had such an impact on Building Societies have been coupled with moves to adopt and implement the marketing concept (Watkins and Wright, 1986; Wright *et al*, 1986).

At the moment, the UK Building Society industry is going through an interesting time. There has always been a concern about consolidation needs. As Building Societies were set up generally, about a hundreds years ago, on the basis of helping members to build properties, people still associate Building Societies with mortgages, and perhaps with some savings. However, the financial industry in the UK has moved on a lot; and also Building Societies. Financial services’ providers have moved into a diversification process, offering current accounts and other more complex financial products. “Building Societies must also consider this new reality to start thinking about increasing the range of products that they offer to the market. However, some of the Building Societies are too small and still highly focused on traditional uses, which makes that very difficult indeed” ( PR Manager, Building Societies Association, December 2006) .

Something interesting with Building Societies is the regional synergies, which make Building Societies have a very strong presence on the influential area. In the case of the smaller societies, growth is quite small and, in some cases, is non-existent. Therefore, they have to collude in order to have any opportunity. The FSA is probably trying to look at Building Societies population of around 30 firms, whilst currently, there are over 60 (Marketing Manager, Company C, Nov 2006). One of the reasons is because, particularly when you go to England, there is a lot of overlapping, with few Building Societies operating in the same area which makes competition unsustainable. Scotland has quite a different market, there are only three Building Societies there (Century, Scottish Building Society and Dunfermline Building Society) which differ in size and business models.

Most Building Societies are growing organically at the moment, but not in the same way that they did before. In the 1960's and 1970's the press reported a case of "branching of Building Societies", consisting of Building Societies having branches in high streets to result in six or seven Building Societies offering their products in the same place. This has stopped and the growth is slower. This is also because in the increase of competition and the apparition of technologies, like the Internet which do not require as much of a physical presence (Executive Director, Company B, June 2006).

There are two main challenges for Building Societies in the future. First, increasing competition in the market place. Twenty years ago Building Societies were the only organisations that were allowed to provide mortgages, so they were enjoying a competition free environment. However, at the moment, there are 24,000 mortgages in the market and thousands of savings products offered by banks and traditional financial institutions (PR Manager, Building Societies Association, November 2006). It is a competitive market with low barriers, and an international involvement. Building Societies have to be able to respond to that growth in competition, without risking their customer base and without the advantages of bigger organisations who count on large economies of scale. Second, currently there is increasing legislation in financial services (Marketing Director, Company D, November 2006; PR Manager,

Building Societies Association, November 2006). As legislation is trying to set up boundaries for that increase in competition and to ensure that customers are protected, the need for being up-dated on such issues, and having the skilled staff to deal with the legal requirements is crucial. For smaller Building Societies, the allocation of their limited resources on “administrative/legal” activities is expensive, which sometimes cannot be afforded. This legislation, coming from the FSA (Financial Services Authority), sets up requirements and procedures for business and operations. This regulation is not unlike the model that we had in the 1970’s, where companies had restrictions in terms of the products that they could offer and the areas where they could operate. At the moment, there is a lot of regulation to protect customers against bad practices in the market place. However, this has a negative impact on the business operations of good, but small, companies. As result, the over-regulation of the industry is becoming an issue (Executive Director, Company B, September 2006; Marketing Manager, Company D, October 2006).

Building Societies’ strength comes from the size of its membership and their attachment to the organisation. Due to this strong link between the organisation and its members, the products offered are designed, with customers in mind, using quite a lot of market research. This will provide a high quality image which will bring a very positive reputation. In this way, “reputation is the asset on which Building Societies are building their valuable proposition; therefore anything putting it at risk should be avoided. The core product that Building Societies provide is Trusted Advice, which is very difficult to gather but very easy to destroy with a bad decision or bad strategy. Customers really value the trust relationship that they have with Building Societies, which is not always aimed at being sold products, but at being advised on the best product for them” (PR Manager, Building Societies Association, Dec 2006).

Due to advances in technology and how it is shaping the business environment, Building Societies will have to be aware of providing a service according to the 21<sup>st</sup> Century. Along with the service in branches, the Internet and call centres have started playing a part of business projects in order to satisfy the contact and availability requirements of customers (Executive Director, Company B, May 2006).

“If we look at Building Societies’ customer bases, there is a high proportion of older people who have been part of the organisation for a long time” (PR Manger, Building Societies Association, December 2006). One of the challenges that Building Societies have is replacing customers. As customers grow older, their financial consumption decreases and eventually, will stop. This leaves Building Societies in a delicate situation as they have to make sure that they attract enough customers to compensate those that leave. Here, there is a problem with the image associated to Building Societies, which is a bit old-fashioned. The challenge is changing that perception with the limited resources that Building Societies have.

On the other hand, the weaknesses are mainly on the efficiency side. As there are no shareholders, Building Societies do not have the external pressure to be efficient, so that source of commitment has to be generated from within. This also means, that the “Building Societies’ service can be better than services offered by a high street bank, which usually focuses on cost cutting by reducing the staff, with the consequent effect on reducing level of service and customer satisfaction” (Executive Director, Company B, February 2007). Because of the relatively small size of the majority of Building Societies, some of the tools that seem to work for the financial industry, like mass media advertising, are not always accessible to them. Most Building Societies do not have the resources to spread their message by using mass media vehicles. However, they have overcome this situation by relying on word of mouth of the membership. The idea is that by listening to customers and offering products which suit them, they will end up sharing their satisfaction and the good service experienced to family members and friends, who hopefully, will become members in the future. The voice of Building Societies may not be heard in the mass media, but certainly it is heard on the communities where they play a paramount role (Executive Director, Company B, May 2006). When Building Societies stand up for ethical, green or social issues, the community perceives its involvement and recognition grows. The public will respond to a financial institution that has ethics at heart. As a result, “instead of money being spent on advertising on television, Building Societies could spend that money on sponsoring events/initiatives relating to the community”

(Marketing Manger, Company D, December 2006). This creates both image and recognition.

Although no traditional financial services providers are direct competitors of Building Societies, they do not target the same customers. However, the power of companies like Tesco, which can develop a closer relationship with customers and therefore, become the providers of those financial products, is making Building Societies, amongst others, realise the necessity of protecting their customers. One way to avoid that undesired situation consists of Building Societies reinforcing their relationship with their customers by getting more involved in their communities and lives. “The challenge for Building Societies goes back to efficiency and facing the real world by getting closer to customers. It is dangerous for Building Societies to look at the current market and think that, as they are doing okay and there are no shareholders to please, they do not require to do anything about the future; they can have a content position” (PR Manager, Building Societies Association, December 2006).

From the customers’ point of view, customers have also changed a lot. “We have moved away from the “corporate style in the 1990’s”, where customers only focused on their own benefit for returning to a more friendly life-style. Recent discoveries about other financial institutions have made customers a bit cynical about banks and other organisations, by increasing their trust in Building Societies” (Business Development Director, Company B, September 2006). Therefore, we can expect Building Societies to emphasise their mutual benefits and their commitment to their customer.

In conclusion, Building Societies are playing in a highly competitive environment where pressure is located on:

- being more efficient;
- creating a strong image which is easily recognised;
- attracting younger customers by becoming a 21<sup>st</sup> Century organisation.

In order to overcome those pressures, Building Societies count on their strengths which are mainly associated with the already existing relationship with customers/members. Moreover, the mutual model, with all its emphasis on membership care and satisfaction, has provided Building Societies with an image of independent advice, which can be trusted. Finally, “the local and regional focus of Building Societies has made them highly involved in community projects and sponsorship” (Marketing Manager, Company D, November 2006). This commitment makes customers perceive Building Societies as something more than mere financial institutions aimed at maximising profits, they are part of the community.

Over the next ten years, Building Societies will go through an interesting evolution period. The demutualisation which happened 10 years ago has given Building Societies time to understand their business and identify their strengths, so this is the right time to start developing strategies aimed at reinforcing those strategies which will pay off in the future. For example, “more mergers can be expected, mainly coming from medium sized Building Societies. The big players are strong enough to defend themselves against any acquisition attempt from other financial institutions. On the other hand, the small firms are too small and too locally orientated to be attractive for companies trying to diversify their business. All this leaves medium Building Societies as the most vulnerable firms to keep mutual and independent. Therefore, collation is the only viable solution as a defence strategy” (PR Manger, Building Societies Association, December 2006). Building Societies will become more ethical with a very strong voice in the financial market.

Finally, the expectation points towards getting closer to the membership base in order to make customers feel proud of the organisation that they ‘own’ and, in that way, remain loyal. The main worry is whether Building Societies will be able to keep their core products. It seems that domestic lending is going to continue to grow in the future as it is presently a massively rising market, within the UK. On the other side, savings is another case, which is more difficult to predict. Firstly, the high rate of debt of UK households suggest that saving money is not a current practice in the market and, if people are not encouraged to save, there will not be funds to lend in



the future. “Another issue is life expectancy. As people live longer, the younger generations’ inheritance takes longer to attain. Therefore, the natural compensation system to transfer funds between generations might not work as well as it did before. If this happens, Building Societies and other institutions will have to design specific products, which will help to restore that flow of wealth” (Executive Director, Company B, January 2005).

The strategy for the future can be summarised by looking at the market as it is, forgetting about how it was ten years ago, and creating products which matched those features. As customers are becoming more sophisticated and literate in financial figures, Building Societies need to be able to explain simply and explicitly what they are offering to customers. In that way, they would be able to understand the benefits of the offers, compare them and select the right one. These products do not have to be the same as those provided by high street banks. The size of Building Societies and their focus on niche markets, allow them to produce specific products for carefully targeted customers.

### 6.1.3 Contextualisation of Company B

Company B was formed in 1848 and is one of the longest established in the UK. It was the first ever Building Society in Scotland, named Edinburgh Property Investment Company, which was changed to Company B in 1929. Since those days, there has been a substantial increase in the number of customers and the range of product offered, matching the region’s development social and economic needs, whilst remaining true to the original tradition of thrift and careful money management (Company B website, viewed on the 20<sup>th</sup> September 2007). It is the second largest building society based in Scotland and the 42<sup>nd</sup> largest in the UK (KPMG Database). At the end of 2007, it was counted as having five branches in Edinburgh, Galashiels, Glasgow, Inverness and Troon as well as a network of 110 local agents throughout Scotland and a Pre-Tax profit of £1,175,000 in January 2008 (Company B, Annual Report, 2008). The main purpose of the organisation can be summarised as promoting home ownership and savings in Scotland by providing competitive financial products combined with a high standard of service to its local members. In

doing so, the emphasis is put on the quality of service, whilst maintaining prudent levels of profitability to ensure the Society's long-term stability (Company B, Annual Report, 2005). The achievement of these goals will rely on the advantages of mutual status, and listening to members' wishes through a knowledgeable and customer-focused work force. This mutual status suggests an independent, mutually operated business operating purely for the benefit of Company B's members and assisting community work in Scotland.

The central purpose and role of Company B is to provide mortgage and savings product to members. The Company is committed to the maintenance of a branch and agency network throughout the region, which provides access to these products supported by a high standard of service (Company B, annual report 2006).

The values of Company B are:

- Provision of best value for our member by retaining our mutual and independent status
- Operation in accordance with the highest standards in all relationships with our members, business partners, environment and the community.
- Treatment of our members equitably, ensuring that our terms and conditions make products available to a wide range of customers.
- Encouragements of the personal development of our staff.

On March 2007, the Board approved a new Corporate Plan to provide direction and strategic goals for the period from 2007 to 2012 (Company B, Annual report 2007, viewed on December 2007) . These goals can be summarised as:

- To remain mutual and independent
- To improve the effectiveness of branches and local offices for the benefit of the members
- To seek technological and business improvements which have a positive impact on our customers and clients.
- To increase the amount of good quality lending.

- To increase membership in a controlled and sustainable way by providing good service and attractive high-quality products.
- To review Society policies and procedures to improve customer levels of satisfaction and ensure legal and regulatory compliance.
- To develop the Society as a professional and friendly organisation.
- To seek ways to provide support for the communities in which we work.
- To continue to provide opportunities for all staff to improve their knowledge and abilities for the benefit of the members.
- To manage profitability to improve the best possible rates on Society accounts while maintaining adequate reserves.
- To adopt 'green' policies throughout the organisation.

In the most recent annual report, Company B has followed its longstanding business model – operating as a traditional building society and concentrating on what it does best. During a period of unprecedented financial difficulties, Company B has performed extremely well with an increase of assets of 14.2% over the previous year and 2.5% of its reserves (Company B, Annual Report, 2009).

## **6.2 What is the role of Customer Retention in the industry?**

Due to the realisation of the relevance of retaining customers, Company B has started implementing some initiatives by listening to its customers' voice (i.e. customer services, continuous contact with customers to track their satisfaction). The important issue here is not about companies asking the questions, but about listening to the answers, so, in that way, customers start receiving the benefits by being proper members of the Building Societies. In the idea of listening to customers, one of the areas of improvement relies on listening and learning from agents that are in contact with customers. "If there is no close relationship between the company and the agent, no matter how much or how often, customers were questioned, their real issues would never be heard. This means involving staff in the development of the building society, due to the rich information that employees and agents have" (PR Manger, Building Societies Association, December 2006). The final impact of this strategy is

investing in creating an evolving relationship with all the elements that have a contact with the customers.

Loyalty and relationships are vital for Building Societies. The idea is moving away from attracting new customers for each product that companies launch into the market, because, usually, they are promiscuous and are not interested in the objectives of Building Societies. What Company B would like to see is doing business with customers and keeping them for 20-25 years, offering products which really satisfy their evolving needs (Business Development Manager, Company B, September 2006).

Due to the business model of Building Societies, they are in a better position than other financial institutions to promote loyalty in their customers. Here, an inherited loyalty comes from tradition and created trust across several generations. Building trust and a relationships is also crucial for Company D. Recently, they have attempted a new “getting close to customer” approach; investing a lot of money in trying to reinforce brand recognition through mass-media advertising. However, they have realised that recalling figures decrease dramatically once that the campaign is not longer on air. Because of this, “they are trying to get a more regional approach with local events and also, to improve the web-site so that customers can use another window to approach us” (PR Manager, Building Societies Association, November 2006).

Aimed at getting close to customers, Building Societies are trying to move towards the advisor role, for example “being aware of the anxiety of acquiring a house, we are thinking of publishing leaflets on how to buy a house or how to deal with a solicitor, “the kind of useful things our customers need to know”. Again, it is aimed at giving something else to our customers in order to build that trust” (Marketing Manager, Company D, November 2006).

Another strategy to keep customers in close developing relationships is by finding partners which are good in their area to provide joint products (Business

Development Manager, Company B, January 2006). Building Societies have a privileged position to find out what really matters to customers due to the existing trust relationship. From that knowledge, new business opportunities arise. However, sometimes customer requirements exceed the scope of Building Societies. When that happens, a company truly seeking relationships, explores the possibilities of the collaboration of “joint ventures” with other Building Societies or service providers, in order to fulfil customers’ needs.

Participants in this research agree that as the fabric of society is breaking, Building Societies have a moral obligation to take action and try to help the process by investing money into the community (PR Manager, Building Societies Association, December 2006; Marketing Manager, Company D, October 2006; Executive Director, Company B, September 2005). Under this objective, building relationships is part of the strategies for Building Societies to be part of the community, rather than being a financial institution focused on making as much profit as possible.

Looking at the barriers for the relationship-building strategy, several issues can be found. Company D identifies the challenge as personnel: “having the people to extract the information and our staff ready for the change of mentality”. This is a complex change that involves IT, front office, marketing and the whole organisation, so unless everyone is committed, the possibilities of success are very low (Company D Marketing Manager, October 2006).

In the same way, Company B identifies as the main barrier for the development of relationships can be found in personnel involvement. “Although Building Societies’ staff are ahead in those issues, than other financial institutions’ employees; still have a long way to go to get them completely involved”(Executive Director, February 2007). In addition to this, the organisation has to change and become less autocratic and more democratic to achieve everyone’s (employees, customers) involvement.

From a broader perspective, the Building Societies Association (PR Manager, December 2006) has identified several issues in the development of relationships.

“The people (employees) of Building Societies are quite convinced about the ideas of trust and putting customers first, which is one of the strengths of Building Societies. Actually, every single survey carried on this matter shows how far they have come in terms of customer satisfaction in comparison with other financial services providers”. In terms of organisational culture, this is apparently the least worrying factor due to the constitutive principle of mutuality aimed at supporting, helping and satisfying customers. Finally, technology seems to be another major challenge to make the most of the ideas of CRM and Relationship Marketing. Having a look at the industry show that there are just a few big players who can afford the high investment involved in those strategies. However, the majority of the Building Societies: “the small Building Societies cannot play in that league” (IT Services Manager, Company B, June 2005). Therefore, they have to find other ways of managing the information that they have about customers in order to build up the relationships.

### **6.3 What is the role that Cross-selling has to play in the industry?**

When talking about cross-selling, it has to be kept in mind, that Building Societies “are not hard-selling organisations where the objective is getting as much profit as possible” (PR Manager, Building Societies Association, December 2006). The idea is offering the right products to our customers in order to satisfy them, not to make the most out of them. If customers realise that, Building Societies’ position will be very positive because customers will trust the advice provided rather than considering it as another way to for the firm to get money.

“Cross-selling and up-selling can only happen just in the environment of having a relationship with the customer. At the moment, the average number of financial products that one customer has with the same provider is about 1.2. There is also a hype on the idea of building relationships with customers through increasing the number of products acquired” (Executive Director, Company B, February 2007). Some institutions just follow this because of fashion. However, others “truly believes that the only viable strategy for Building Societies in the future, is by building relationships with customers by transforming customers into advocates” (Marketing Manager, Company D, November 2006)

The Building Society Association suggests that “cross-selling has to be the strategy to follow in order to satisfy Building Societies’ customers. However, that strategy has to be carefully designed with the right product to the right people, in order to avoid damaging the relationship and the trust that customers have in Building Societies”. The issue when talking about cross-selling is, that Building Societies will probably take a different approach to the idea of selling products. The objective is not about selling as many products as possible in order to maximise the potential of each customer, but selling the products that customers need and may find beneficial. “Building Societies are quite reluctant to promote products in a massive and general way. Some of the benefits of this strategy is that customers need to feel that they have been sold out at and when an offer comes from Building Societies, customers pay more attention to it because they immediately trust its adequacy” (Marketing Manager, Company D, October, 2006).

Building Societies have to be very careful by offering the right product to the right customer, to avoid destroying that valuable trust. Building Societies are very good at developing long-term relationships with their customers, which allows them to increase trust and make customers ask for the products, easing selling activities. One of the advantages of Building Societies is that people welcome the fact that they are not sold out or bombarded with products. However, “Building Societies spend a lot of time working on what their customers’ needs are, in order to produce it by analysing all the information that they have gathered from customers” (Executive Manager, Company B, September 2006). This might be seen as losing some opportunities by being conservative and not pro-active in offering more products. However, the risk of not being able to offer quality of service is more important.

Although the cross-selling strategy might be seen as very attractive and will enable Building Societies to stay in the market for another hundred years, there have been some limitations identified. First, “letting down customers’ trust can be a barrier when cross-selling strategies are not precise”. Making mistakes can destroy or ruin that trust, the relationship and the possibility of any future business opportunities.

The impact of unsuitable offers will be deeper on Building Societies than on other Financial Institutions, due to the trust and high expectations held by customers. “Customers know that running a Building Society is not about getting as much money as possible, but about giving the right products, based on an underpinning trust. Building Societies do not offer everything they can. They are more selective in order to guarantee their quality of service that eventually will definitely be distinguishable feature. “Going against that premise will destroy a century of trust and will jeopardise the future of Building Societies” (PR Manager, Building Societies Association, December 2006).

A second barrier to develop a proper cross-selling strategy is having a reliable data base where segments of customers can be easily recognised, together with their necessities. “This is so crucial, as the effect of offering the wrong product or offering it too often has a negative impact on the satisfaction levels of customers who can perceive Building Societies as profitable seekers” (Business Development Director, Company B, September 2006). Staff training is also a key issue in order to make people understand that, when dealing with customers, that there are other products which they could offer and how to introduce all this information into the system to make future opportunities easier. This second limitation is a clear reflection on the difficulties mentioned above, that Building Societies are facing when they try to adopt the CRM and Relationship Marketing suggestions.

## **Conclusion**

This Chapter has shown the main features of the UK financial services industry in general, with a particular emphasis on Building Societies. After understanding the context of the industry, the output of interviews with key players of the industry, have shown how the complexity of the sector is determining the strategies to work on. In this way, after increasing competition, Building Societies have begun to recognise the value of customer retention. As a result, firms are re-inventing their approach to maintain, develop and enhance relationships with their customers. The evidence of respondents on retaining customers has been enough evidence to answer



to research question one, concerning the value of keeping customers within the organisation.

After accepting the value of customer retention, comments and discussions have suggested that, within retaining customers, cross-selling strategies are key areas which Building Societies are working on. Actually, it seems that these initiatives are perceived as being very interesting because of: 1) the economic benefit to customers acquiring more products and increasing their profitability; and 2) the “emotional bond”, developed between the company and its client, which is expected to generate customer loyalty. Resulting from these conclusions, question one has been successfully addressed.

The final section of this chapter has focused on describing the company, its market, current strategy and mission. This contextualisation is very valuable in order to understand the most suitable customer retention strategies and how cross-selling opportunities should be articulated in Company B.

After determining that customer retention is a key strategy to develop by Building Societies in the UK and that cross-selling seems to be a firm candidate to achieve customer retention, the next step is about developing those specific cross-selling strategies adapted for Company B. Having reached this point, the question is whether a generic cross-selling strategy is sufficient to respond to all Company B’s customer needs or, on the other hand, several strategies would be more adequate (research question three). With this question in mind, the following chapter aims to develop the quantitative approach for Case Study B, addressing research question three with the attempt to implement the “Who-What-When” framework.

**Chapter seven**

**Case Study Two Company B:**

**Customer Retention & Cross-selling**

**in the UK Building Society Industry.**

**Quantitative Research**

**Introduction:**

The qualitative research concluded in the previous chapter that customer retention and cross-selling are key concepts progressing in the Building Society industry. Now the objective is to address research question three through the application of the “Who-What –When” framework, which was developed in the pilot research and successfully tested on Case Study A. The application of this framework is framed into the quantitative research approach described in the methodology chapter and aims at answering research question three, which for this effect, has been translated into two sub-questions. This refers to the idea that a common/universal cross-selling strategy is not suitable for retention purposes; actually, it states that customer characteristics, consumption patterns and time of purchase, determine several tailored, cross-selling strategies.

In order to address the question, the analysis starts with the segmentation process (Who). The validation of the results of this analysis is crucial to determine whether there is enough evidence of differences across segments to support specific retention strategies. If customers are different, it could be expected that their consumption will differ too. Addressing those consumption patterns will be the main objective of the “What” section conducted for every segment. The analysis of the consumption is conducted using the Markov Chain Processes and Probability Modelling. The results are graphically displayed in order to clarify the inter-connections between products, which will be used to infer cross-selling and up-selling strategies across different purchases. The final stage of this framework consists of assessing the differences at the time of purchase (When). Different products might have different maturities; therefore, if Company B wants to design effective cross-selling strategies, or understanding when customers are more likely, or ready, to buy the next product will be crucial. The conclusions resulting from the internal validity of the analytical techniques and the goodness of fit of the models, are used to address research question three.

## **7.1 Case Study B Data**

Company B provided for this project their transactional and customer data bases. As the two data sets were in two different locations, the process of putting them together was quite time consuming. Eventually, the data set was formed for over 55,000 customers who were still consuming at least one product from Company B (See Appendix 4, Section 1). For each customer the information available included socio-demographics (Age, Gender, Occupation, Region and Age, when buying the same product) and consumption information for up to five products (Type of product, Balance, Channel). After cleaning and validating the data, the final set came down to just over 50,000 customers. This final number was, again, randomly divided into three sub-sets: 1) Training representing 50% of the data set; 2) Validation with 25% of the data set; and 3) Testing with the other 25%. As it was intended for Case Study A, the rationale of splitting the data set into three is aimed at assessing the stability of the result. Again, the tests were conducted on the Training sample to obtain the main solutions. After that, the validation sample is used to replicate the solution step by step. Finally, the Test sample assesses whether the results obtained on the third attempt are statistically equivalent to the previous results. Accepting the similarity of the results obtained on the three sub-samples is a significant way of assessing the internal validity of the analytical results.

## **7.2 Step 1: WHO buys from Company B?**

The first step in the application of the “Who-What-When” consists of understanding the customer base of Company B. The way of approaching it has been by segmenting the customer base into groups of customers with similar socio-economic and consumption behaviours. The technique used is the K-means clustering which, as mentioned before, has the limitation of the subjective decision of the final number of clusters selected.

The variables introduced to run the K-means clustering are all the socio-demographic variables provided in the data base (i.e. age, occupation, region) and also the consumption (i.e. number of products, type of product, channel) variables at the first stage. After that, the variables with low discrimination power and those highly

correlated were removed from the model, resulting in redefining it once, and then again, until reaching the final solution. The variables with the highest discrimination power, ranked in descending order, are Age, the First Product Acquired, the Starting Age and the Length of the Relationship (Table 7.1). As it has been mentioned previously, the high relevance of Age on the cluster creation might point towards the idea of Customers' Life Cycle Theory. Additionally, the high significance of Product 1 (first product acquired) suggests that customer characteristics and consumption are strongly linked. This result suggests that a common strategy to cross-sell products might not be entirely adequate.

Table 7.1: Company B Segmentation: Final Solution -Variables Significance

Variables	Significance
Age	1
Starting Age	0.548879
Product 1	0.742916
Length Relationship	0.451278

With those variables as main discriminators, several solutions were possible. The final decision, once again, falls into the researcher's judgement to have a meaningful enough solution with a manageable number of clusters. This decision has been made by assessing the values and their improvement when moving amongst solutions. These criteria are,  $R^2$ , the Cubic Clustering Criteria and the Pseudo-F statistic. Table 7.2 displays these values for the six solutions considered after removing solutions with low values.

Table 7.2: Company B Possible Segmentation Solutions

Solusior.	N# clusters	$R^2$	CCC	Pseudo-F stat.
Solution 1	2	0.554	24.547	21102.09
Solution 2	8	0.757	67.924	11501.86
Solution 3	7	0.711	70.593	1955.44
Solution 4	5	0.782	65.507	1773.74
Solution 5	4	0.7881	76.447	1144.67
Solution 6	3	0.54620	39.076	2363.05

The decision of the optimum solution has been made by taking into account several factors. First, the number of clusters and their sizes were considered to avoid oversimplification or too much complexity. Along with this criterion, the objective is finding the solution with the highest  $R^2$  and Cubic Clustering Criterion (CCC). Under these parameters it seems that the decision lies between a solution with four and five clusters<sup>69</sup>. In terms of the CCC, Solution 5 is better as there is a significant improvement in the final value of the parameter. However, Solution 4 has a higher  $R^2$  value. The argument here is between introducing an extra cluster into the analysis or losing a part of precision with a simpler solution<sup>70</sup>. Looking at the figures, it seems that the introduction of an extra cluster in the analysis does not compensate for small improvements on the CCC criteria. As a result of this evaluation, the solution selected splits the customer base into four clusters, which account for 77% of the total variation.

In order to gather a better understanding of the characteristics of the clusters forming the final solution, Table 7.3 defines, in a simple way, their main features. For continuous variables (Age, Length of Relationship, Balance), the average has been displayed. On the other hand, for categorical variables (Product Category, Region, and Occupation), the highest frequency has been represented in the table. Finally, the combination of these categorical and numerical values has been used to label each group.

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<sup>69</sup> (Solution 5 and Solution 4)

<sup>70</sup> A closer analysis of the data shows that the improvement in that precision would be 0.5%.

Table 7.3: Company B Cluster Classification

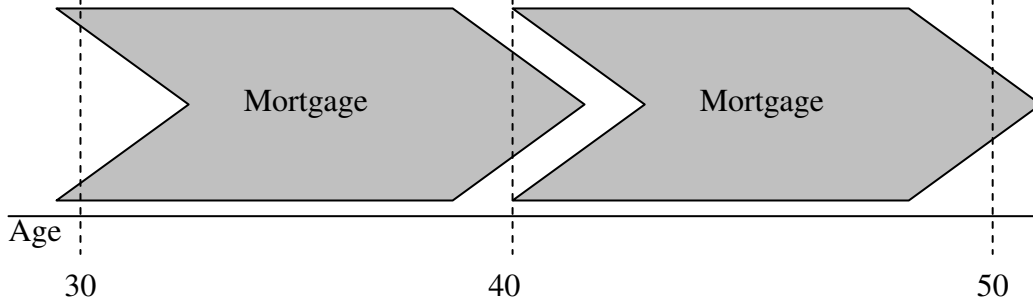
	Cluster 1	Cluster 2	Cluster3	Cluster 4
	First Nest	Young Savers	Heavy Investors	Future Planners
Frequency	7034	1606	2217	3752
Age	40.29	17.20	35.22	58.28
Starting Age	29.51	7.80	20.04	50
Region	Glasgow	Glasgow	Glasgow/Edinburgh	Glasgow/Aberdeen
Occupation	Health Services	Students	Blue Collar	Manager
Channel	Branches	Acc Operator	Branches	Branches
Product Category	Mortgage	Savings	Investment	Investment
Account 1	Mortgage	Spot Loan/YoungSIS	Spotline	Spotline
Subaccount	Investment	Savings	Investment	Investment
Length Relationship	11 years	10 years	15 years	8 years
Total Products	1.82	1.35	1.46	1.73
Balance £	5,519	11,34,79	3370,22	7022,31

### 7.2.1 Cluster 1: First Nest

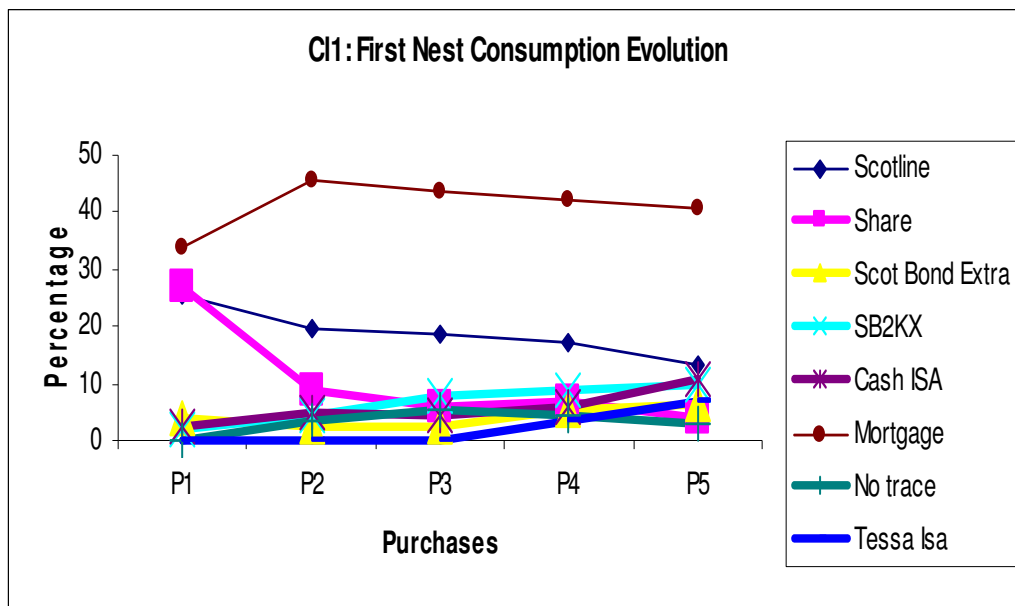
These customers account for 33% of the data set, making them the second largest cluster identified. Mainly located in Glasgow, they are in their early 40's with an average life in the company of 11 years. This means that their age when they acquired their first policy was around the late 20's. Finally, it can be said that there is a significant proportion of those customers working in the Health Services.

In terms of First Nest consumption, it mainly focuses on Mortgage (34%) acquisition through the branches. With 1.82 products, this is the cluster with the highest consumption rate and the second highest balance on their accounts. As a secondary acquisition, First Nest tends to go towards investment products like Shares (26%). The consumption of this cluster is summarised in Graph 7.1.

Graph 7.1: Company B Consumption Sequence First Nest



Graph 7.2: Company B Product consumption evolution First Nest



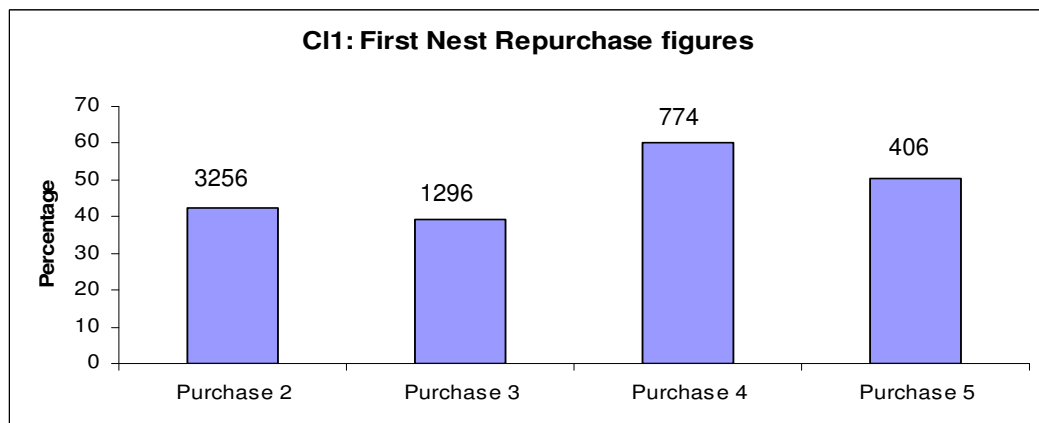
From the previous charts it can be highlighted that the heavy consumption around Mortgages is made by First Nest. This paramount role of Mortgages can be observed in Graph 7.2. Together with Mortgages, there are also two products which compete for that top position on the first purchase: Shares and Scotline. However, unlike Mortgages, these products experience a significant drop in the second purchase which continues during the rest of the period analysed. Finally, the rest of the investment and saving products have a subsidiary importance with a growing trend.

A close look at the active retention figures for First Nest (Graph 7.3) shows that only 40% of consumers acquire a second policy. This shows that the transition between



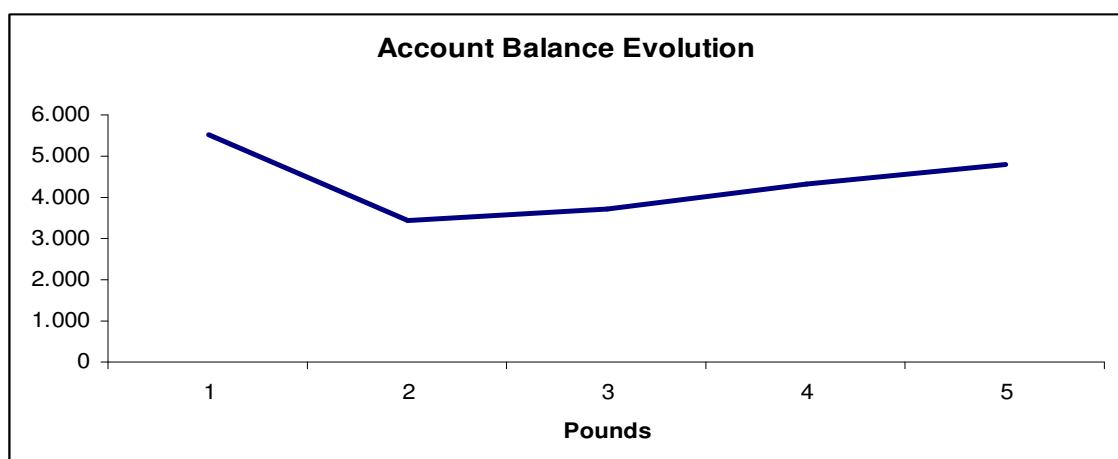
the first and second purchases is a critical moment which opens the door to initiatives to re-activate or improve the way that relationships with this cluster are managed. Moreover, the retention ratio decreases until the fourth purchase, when it suddenly changes to reach a value of 60% of customers acquiring another policy after the fourth purchase.

Graph 7.3 Company B Active Retention Analysis First Nest



Finally, in terms of the average balance, Graph 7.4 presents quite a steady evolution around £5,000. In more detail, there is a drop after the first purchase, which coincides with that moment where customers are more likely to leave or become passive and, after that purchase, a continuous recuperation which ends up almost at the original value.

Graph 7.4: Company B Account Balance Evolution First Nest

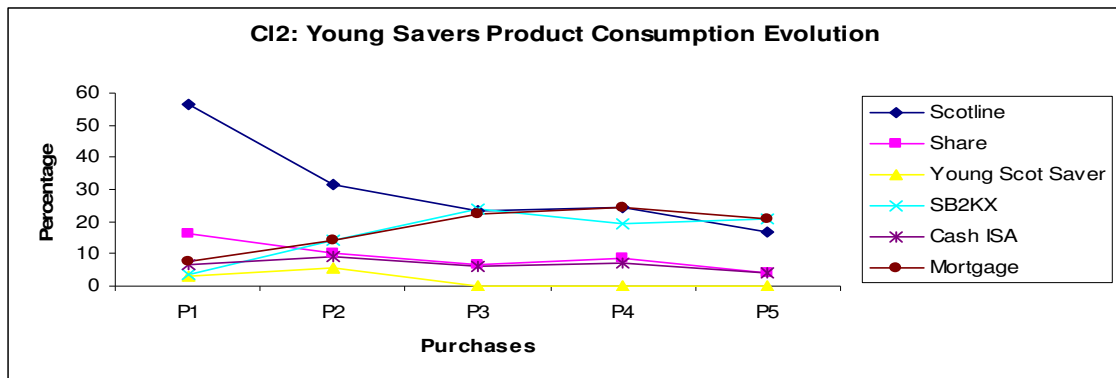


### 7.2.2 Cluster 2: Young Savers

The second cluster is Young Savers, which represents the smallest proportion of customers with just around 8% of the data. This segment is mainly formed by students under 18, who have been consuming saving products for at least ten years. It means that parents or other relatives used to open savings accounts for children when they were around 10 years old. As it could be expected, these customers have the lowest consumption rate (1.35 products) and an average balance (£1,200). Finally, in opposition to the other clusters, Young Savers seem to prefer the Account Operator channel over Company B branches to negotiate the conditions of the saving products acquired.

In terms of consumption (Graph 7.5), Young Savers mainly focus on Scotline, one of the most popular saving products offered by Company B. After the third purchase, SB2KX (investment type product) seems to take the lead to be head-to-head with Mortgages on the fifth purchase.

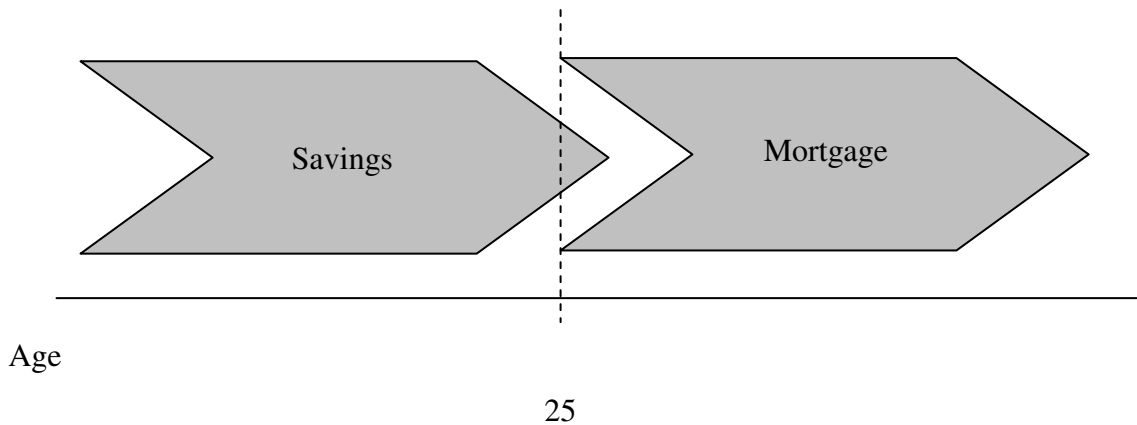
Graph 7.5: Company B Product Consumption Evolution Young Savers



The following graph (Graph 7.6) summarises the consumption of Young Savers which is mainly comprised of two categories of products, Savings, until customers are in their mid 20's, and Mortgages, after then. This change of consumption coincides with the transition between this cluster and First Nest, once customers have reached the right age. Previously, Young Savers, could only acquire saving products

due to the legal restriction to acquire more complex financial products by under age customers.

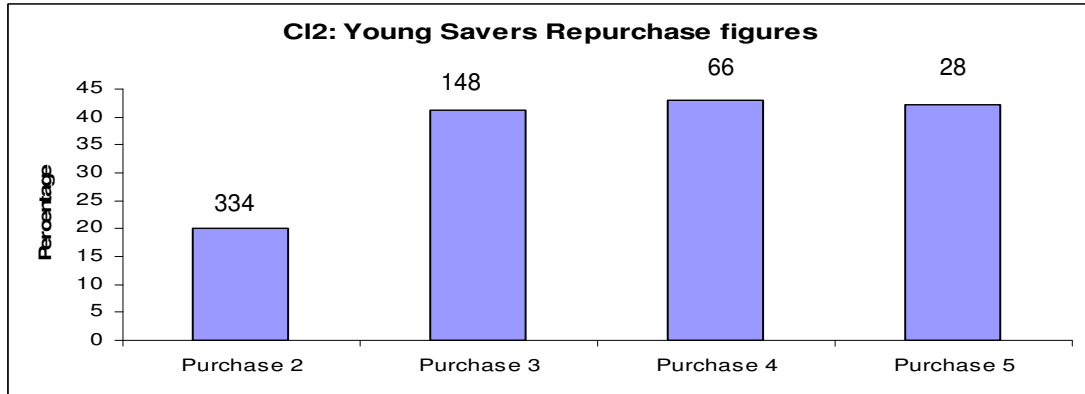
Graph 7.6: Company B Consumption Sequence Young Savers



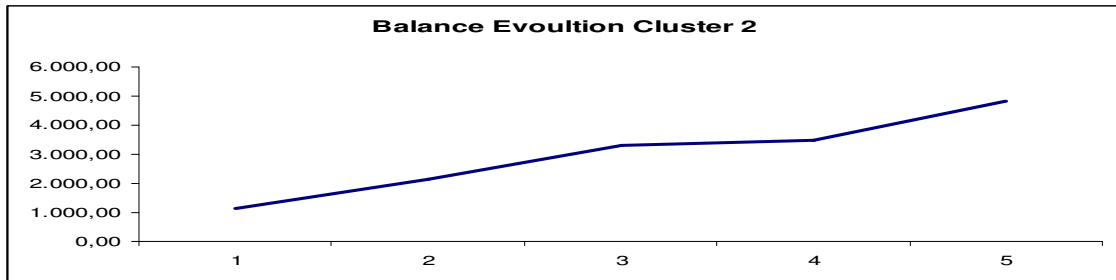
In contrast to other clusters, Young Savers present a challenge for Company B, as only 20% of customers acquire a second policy, see Graph 7.7. However, after this decision, the repurchase ratios increase to cover around 50% of the customers. This situation offers clear opportunities for Company B to invest in developing a relationship, as these savers of today can be the profitable customers of tomorrow. Moreover, the key issue for this cluster is that the initiators of the relationship are not the final consumers of the product. Therefore a two way strategy is requested here. One to attract the acquisition of the products in the first instance, targeting parents and relatives and, secondly, targeting the final customer to build a relationship and some kind of bond strong enough to last until these customers reach the legal age to consume financial products for themselves.

Finally, the suggestion of investing in the relationship with Young Savers seems quite appropriate as the balance presents a positive trend which starts on £1,000 and ends on around £5,000 (Graph 7.8).

Graph 7.7 Company B Active Retention Analysis Young Savers



Graph 7.8: Company B Account Balance Evolution Young Savers



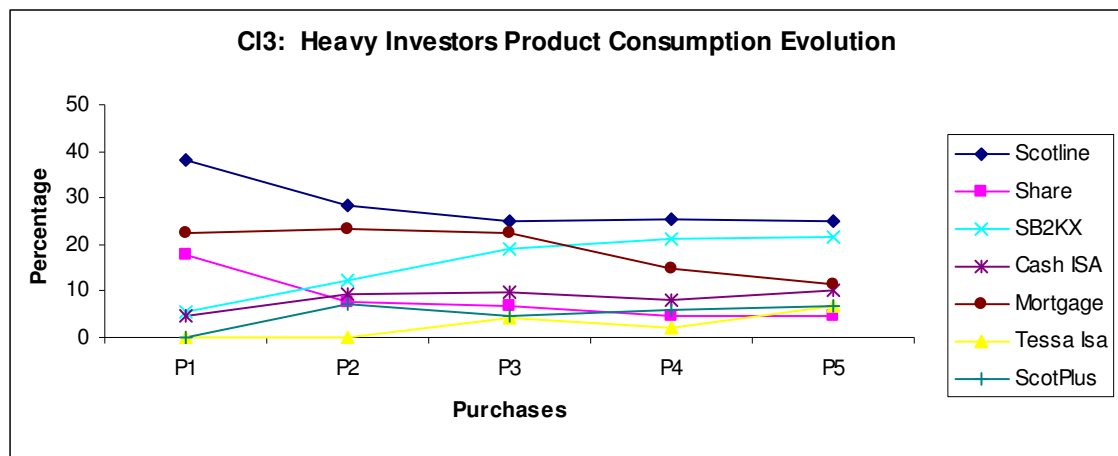
### 7.2.3 Cluster 3: Heavy Investors

The third cluster, accounts for the largest number of customers with around 42% of the base. This segment is quite significant not only because of its size, but also because of the consumption that it presents. First, Heavy Investors are customers with an age of around 35 years old who have maintained a relationship with Company B for 15 years, which leaves the attraction age for this cluster in the early 20's.

Located mainly in the two biggest Scottish cities, Edinburgh and Glasgow, Heavy Investors are mainly characterised under the Blue Collar professional category. Although they have a long relationship with Company B, their consumption rate is not very high, with just 1.46 products on average, and the second smallest balance (£3,300).

As mentioned before, the distinctive feature of Heavy Investors derives from the product they acquire. Due to their socio-demographic profile, we could expect them to be a part of Family Planners with the normal acquisition of any Mortgage product evolving towards Investment solution to start preparing their retirement. However, Heavy Investors is a group in itself, within the normal acquisition cycle. As we can observe from Graph 7.9, Scotline, basically an investment product, leads the consumption across the different purchases, closely followed by mortgages during the first purchases and by SB2KX<sup>71</sup>. Due to this focus on investing is why the cluster has been named “Heavy Investors”. From this, we could wonder if there is a market niche for customers highly concerned about their future and about making the best of their money. Being able to identify such a group would be a big plus to create a competitive advantage by designing “tailored” investment products. Moreover, the fact that mortgages do not lead in consumption, this cluster being a natural consumer for it suggests that, for this segment, Company B is basically perceived by this cluster as an investment product provider. However they might not associate the company with other products (savings, mortgages) and, therefore, there is a potential loss of business opportunities.

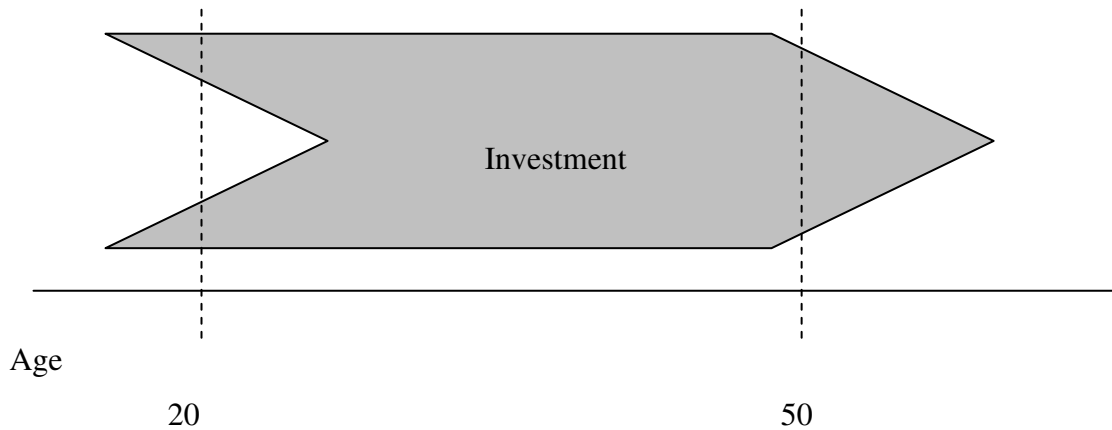
**Graph 7.9: Company B Product Consumption Evolution Heavy Investors**



<sup>71</sup> Another investment product, a bit more complex than Scotline.

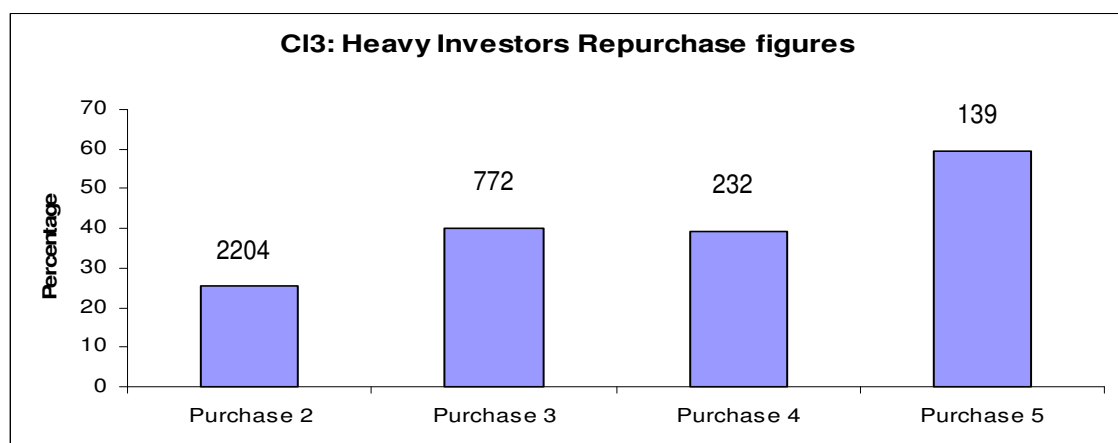
A graphical way of representing Heavy Investors' consumption evolution can be summarised in the following figure (Graph 7.10). This clearly indicates how Heavy Investors maintained a constant acquisition sequence for around three decades which connects with the acquisition pattern of the last cluster.

Graph 7.10: Company B Consumption Sequence Heavy Investors



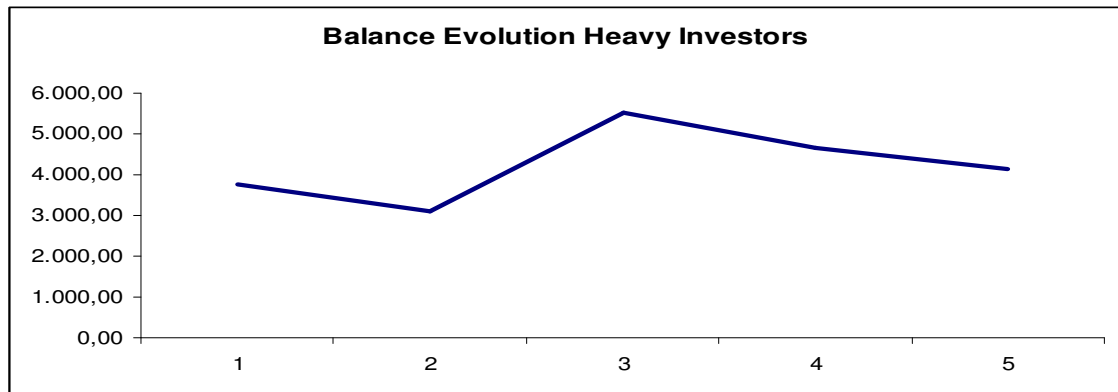
Looking at the repurchase figures (Graph 7.11), once again, we find that the most challenging purchase comes after the first product. Promoting the acquisition of the second purchase seems quite difficult as just one third of Heavy Investors go for it. However, after this purchase, promoting repurchase is apparently easier as the figures increase to result in around 60% of the customers acquiring a fifth purchase.

Graph 7.11: Company B Active Retention Analysis Heavy Investors



Finally, an analysis of the balance evolution for Heavy Investors (Graph 7.12) shows how, during the first two purchases, the product value is located at around £3,000. After that, it reaches a peak of around £6,000 on the third purchase, to slowly decrease on the last two purchases.

Graph 7.12: Company B Account Balance Evolution Heavy Investors

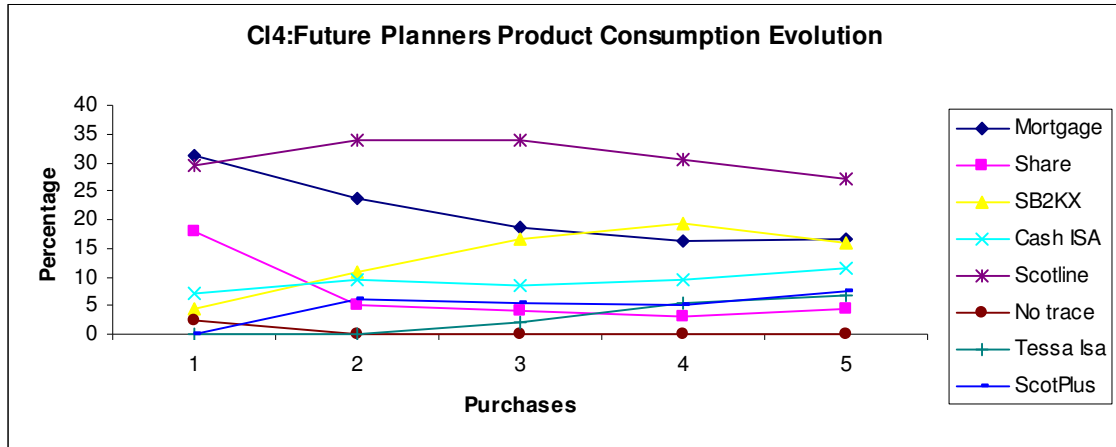


#### 7.2.4 Cluster 4: Future Planners

The final cluster, called Future Planners, represents up to 18% of the customer database. The main characteristics of this cluster are that they are mature customers whose average age is about 59 years, with an average life of eight years operating with the company, this sets the attraction age at around the early 50's. The main location of Future Planners can be found in Glasgow and Aberdeen where they develop managerial activities.

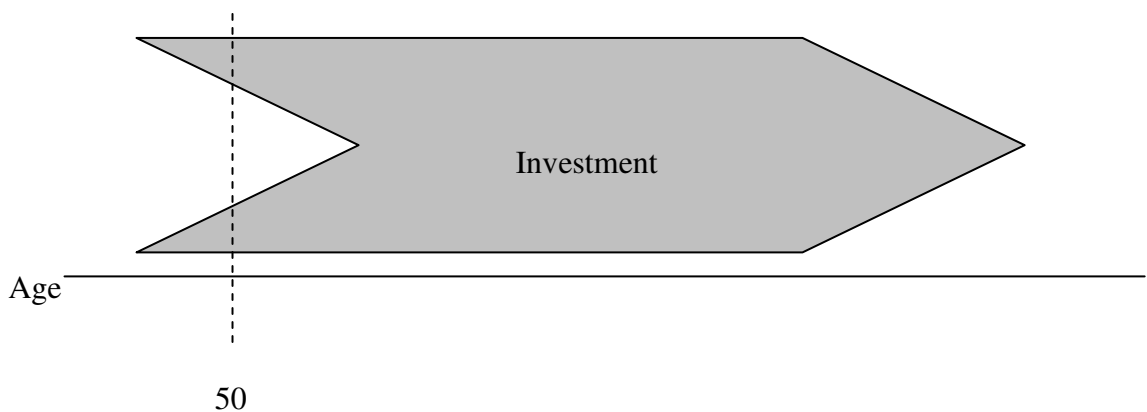
Future Planners present the highest account value (£8,000) with an average consumption of 1.71 products, which mainly focus on investment options like Scotline. Graph 7.13 clearly shows how the consumption of this cluster coincides with the end of the hegemony of the mortgage to leave room for the Investment products (Scotline and SB2KX). In this way, while mortgages reduce their presence in the basket, Scotline grows to keep a steady consumption at the end of the third purchase.

Graph 7.13: Company B Product Consumption Evolution Future Planners



As a summary of Graph 7.14, it can be concluded that on the first purchase, Mortgage and Investment products are head-to-head in leading consumption. However, it is Investment with a main product (Scotline) and a few subsidiary products (SBKS and Cash ISA), which represent this group. Due to the age maturity of Heavy Investors, such an emphasis on acquiring Investment products can respond to the necessity of starting preparing for their retirement. The following figure represents the consumption of this group of conscious customers.

Graph 7.14: Company B Consumption Sequence Future Planners

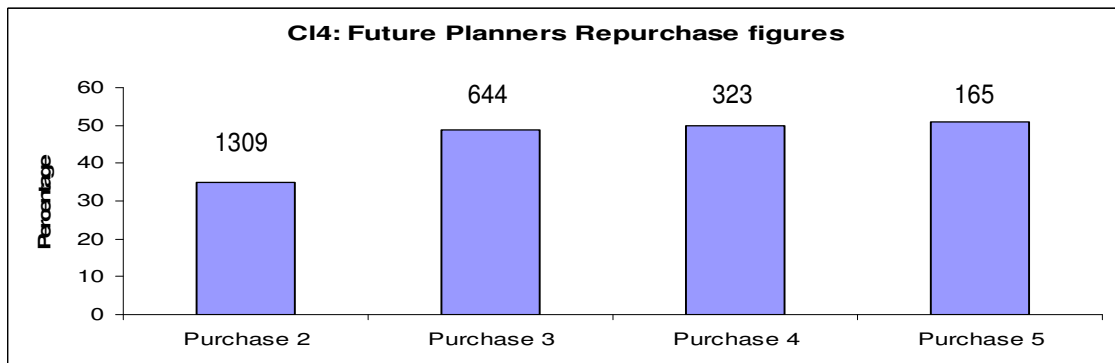


The analysis of repurchase again presents a challenging situation in promoting the acquisition of a second policy, although the figures here are not as dramatic as for



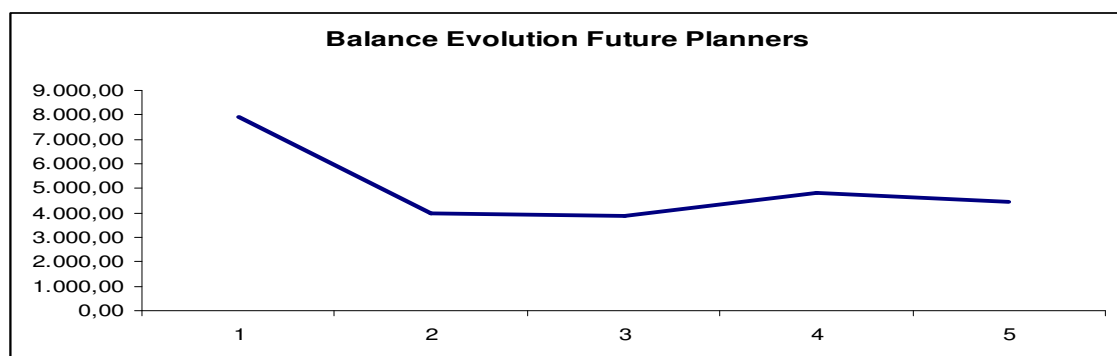
other clusters, around 35% acquire a second product. After this second purchase, the repurchase rate remains constant around 50% of the customers (Graph 7.15).

Graph 7.15 Company B Active Retention Analysis Future Planners



Finally, the evolution of the balance (Graph 7.16) suggests that the balance is quite high on the first purchase, coinciding with the presence of mortgage products. However, when investment takes the lead the balance halves (purchase 2) and remains around £4,000, with a slight increase on the fourth acquisition.

Graph 7.16: Company B Account Balance Evolution Future Planners



### **7.3 Generic Cross-selling strategy or tailored Cross-selling strategies?**

Coming back to the original purpose of this research, the objective was to identify whether specific cross-selling opportunities to customers, according to their personal and purchase characteristics, would make sense in the financial industry. As it has been demonstrated in the previous chapter, respondents to this study are not only clear advocates of customer retention within their industry (research question one),

but also, cross-selling and up-selling are considered equally important as one of the vehicles to achieve that retention goal (research question two). Therefore, the only question pending is about whether there is a universal repurchase strategy, applicable to all customers, “one size fits all”, or whether those strategies need to be shaped to respond to customer needs derived from their personal and consumption circumstances (research question three). This question should be answered before attempting to go any further in developing the Who-What-When framework. Research question three has been refined into two sub questions and it is stated as follows:

*Do Cross-selling strategies have to be shaped by taking into account who is buying, what he/she buys and when he/she buys? Therefore, is the Who-What-When framework applicable in the financial services industry?*

This questions will be partially answered using the  $X^2$  Homogeneity Test applied to the consumption patterns of the four clusters. The hypothesis associated to the test is

*Ho<sub>1</sub>: The four clusters have the same consumption pattern across the five purchases*

*Ha: There are some differences in the consumption patterns of the clusters across the five purchases.*

The test has been done comparing the product consumption proportion (mortgage, investment and saving products) for each cluster, at each purchase (from the first to the fifth) under the objective of comparing whether they are the same (they are homogeneous). Resulting from the test, the calculated  $X^2$  had a value of 23,765, 98 with a p-value associated of 0.000. As a consequence, the null hypothesis of homogeneity of the consumption through the clusters<sup>72</sup> can be rejected. The results are presented in Table 7.4. As a conclusion, the hypothesis of homogeneous consumption has been rejected suggesting that each cluster has a singular consumption pattern not only in general terms, but also for each specific purchase.

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<sup>72</sup> At 90%, 95% and 99% confidence levels

Table 7.4:  $X^2$  value for Hypothesis Ho<sub>1</sub>

	T.Stat = 23765.984    D.F.(# Cl.-1)= 3			
Significance	$X^2$ (90%)	$X^2$ (95%)	$X^2$ (99%)	$X^2$ (99.9%)
$X^2$ Value	37.91	41.34	48.28	56.89
Decision	Reject	Reject	Reject	Reject

An initial conclusion of this analysis is that the use of Who-What-When framework, with the aim of defining a universal cross-selling and up-selling strategy applicable over the four clusters is not suitable, given the consumption differences evidenced. This result leads towards the same finding from the previous chapter where tailored repurchase strategies were supported. Also, it implies that the third research question has been successfully answered regarding differences in the consumption across segments. Therefore, Company B should develop and implement specific cross-selling and up-selling, which responds to the needs/characteristics of its clusters.

So far, it has been determined that Company B's customer clusters are individual enough to justify a personalised cross-selling strategy for each group. However, around Research question three, there is still a question to answer: does the consumption within each cluster remain constant over time and therefore independent of the previous acquisition? As in the previous chapter on Company A, a way to address this question is by testing whether a Markov Chain Process would fit to predict the consumption pattern of each cluster. The advantage of this model would be that than instead of calculating the repurchase probability for each product at each purchase and for each cluster, a common unchangeable set of probabilities can be estimated as they remain constant.

As explained earlier, the Markov Chain Process is characterised by two main conditions. The first one (No Order Zero) assumes that each purchase depends on the previous one. If this is the case, tracking consumption patterns becomes crucial for Company B, as different products will have different repurchase probabilities

depending on the products acquired before. The second condition (Stationarity) states that this inter-purchase dependency remains constant over time.

To prove the first condition, the test is as follows:

*Condition 1: The types of policy acquired are independent from the previous type*

The p-values<sup>73</sup> associated to the  $X^2$  values, for all the tests, are less than 0.05, therefore this condition of independency cannot be accepted<sup>74</sup>. Resulting from this test, it can be assumed that the purchase decisions made have a significant impact on what product will be acquired next. Therefore, the first condition of the Markovian Process has been successfully proved and also supports the argument mentioned before, that consumption of financial products is not made independently, but that it responds to the changing needs of customers.

The second condition (Stationarity) is aimed at determining that the repurchase probability remains constant over time. This means that once the inter-purchase probability has been determined, this does not vary independently the number of purchases made before. This condition states as follows:

*Condition 2: Product Purchase decision is homogeneous across different time periods*

As already happened to Company A, the p-values<sup>75</sup> for the  $X^2$  Test<sup>76</sup> used to prove this condition is smaller than 0.05. Consequently, Condition 2 cannot be accepted. In short, this implies that the product repurchase probability changes according to the number (and type) of products bought before. This result also has the implication that the Markov Chain Process is not suitable to predict cross-selling and up-selling

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<sup>73</sup> The condition has been tested using contingency tables, where product category consumption in time<sub>t</sub> was displayed in the rows, and product category consumption in time<sub>t+1</sub> in the columns. This table was conducted for each cluster including all the products.

<sup>74</sup> See Appendix 4, section 2

<sup>75</sup> The condition has been tested using contingency tables, where the proportion of each type of product category was displayed in the rows, and the purchase number was displayed in the columns. This table was conducted for each cluster including all the products.

<sup>76</sup> See Appendix 4, section 3

opportunities; however, this finding makes sense, based on the kind of products under analysis. In this way, it sounds quite sensible that the probability of negotiating a mortgage is not the same when customers are under 18, therefore not legally allowed to get one, than when customers are in their late 20's and thinking about acquiring a property. Although the Markov Chain Process cannot be tested, at least this analysis has been useful to prove how the Consumption Life Cycle plays a determining role in the decision of the acquisition of financial products.

The analysis run before trying to fit an order one Markovian process has responded to the need to address the requirement of identifying tailored cross-selling strategies for each of the clusters, derived from the WHO section for Company B. Although Research Question three has been successfully approached, one question still remains around whether only one cross-selling strategy was enough to capture the financial needs of each cluster and whether those needs evolved over time, requiring a detailed analysis of how products and time evolved together. Through this process, it has been stated that the Markov Model does not entirely fit the purpose of this research, as the Stationarity condition had to be rejected. This means that present consumption depends on past acquisitions, however, this dependency varies depending on how many products and which products, were purchased before.

To sum up, it can be concluded that designing a generic cross-selling strategy for all customers of Company B will not be very successful, given that different customers have different consumption patterns. In addition to this, a unique cross-selling strategy for each is not comprehensive enough, as financial products consumption depends on the number of products acquired and the type of products bought. Although the Markov Chain Process cannot be used, the following section presents a detailed analysis for each cluster to re-take the objective of designing cross-selling and up-selling opportunities.

#### **7.4 The “WHAT” analysis for First Nest**

The first of the clusters, First Nest, can be found in Glasgow, and it seems that Health Services is the preferred occupational activity. In general terms, these

customers acquired their first product when they were in their late 20s, with an average life of around 10 years. This means, that at the moment, we can find this group in their early 40's. The principal product acquired by First Nest is Mortgages with an average balance in the accounts of £5,000. Together with this high balance<sup>77</sup>, we find a significant “high” consumption. First Nest is the closest segment to get two products per customer – actually 1.82 - which shows clear business opportunities.

The reason for the cluster denomination is a combination of product consumption features and socio-demographic consumption. In terms of the former, there is a significant consumption of mortgage products over the five purchases under analysis. The later coincides with the average age, to acquire their first property in the UK (*“the average age of customers acquiring their first mortgage (in the UK) is between the early and mid 30s.”*)<sup>78</sup>. This means that First Nest should be at the right time to acquire their first property. Looking at their consumption evolution it seems quite clear that mortgage products are the most popular amongst those customers with a significant gap between the other products. As a second option, First Nest select some investment products like (Scotline and Shares), which follow a descending pattern. Other products like, No trace, Cash ISA and SB2KX behave as subsidiary products with an increasing presence in the basket around the fifth purchase.

Further conclusions can be found by looking at the Transition Graph (Graph 7.17) which shows the inter-connections between products for the first and the second purchases (probabilities are expressed as percentages). It could be concluded that products like mortgages offer high up-selling opportunities. However, in terms of cross-selling, they do not seem to have any clear relationship with any one product, but weak inter-connections with other investment products like, SB2KX, Shares, ISA and Scotline.

Investment products, on the other hand, have lower up-selling rates varying between 10 and 16% of purchases, but, again, show weak relationships between those which are mainly unidirectional. For example, while the probability of acquiring an SB2KX

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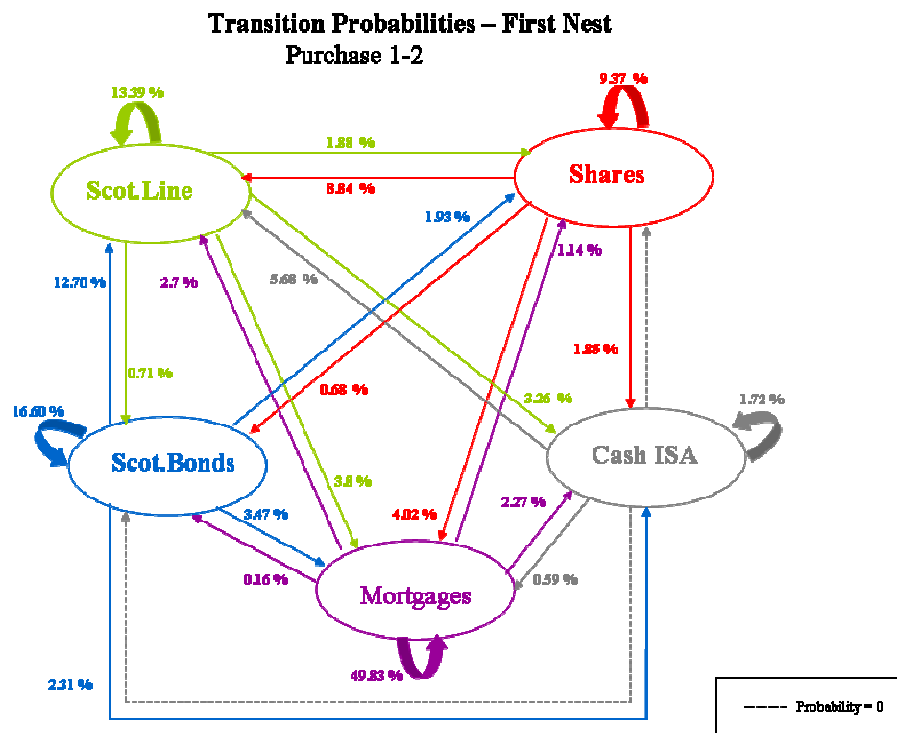
<sup>77</sup> the second highest balance out of the four clusters

<sup>78</sup> Interview with Company E conducted on the 29th December 2006.

after contracting Scotline is less than 1%; the inverse probability is close to 13%. The continuous observation of this phenomena clearly suggests a sequential acquisition of financial products for Company B and, for future research, it could be analysed in terms of the financial complexity of the products and its evolution.

Finally, the case of Cash ISA should be highlighted, as it receives consumers from other products in the previous purchase. However, it does not contribute in the same way, this means that it offers limited cross-selling opportunities. On top of that, the up-selling rate is very low (2%), which implies that this product is a kind of “dead end”: once customers have purchased it, the opportunities coming from ISA products are very limited.

Graph 7.17: Company B Transition Graph First Nest

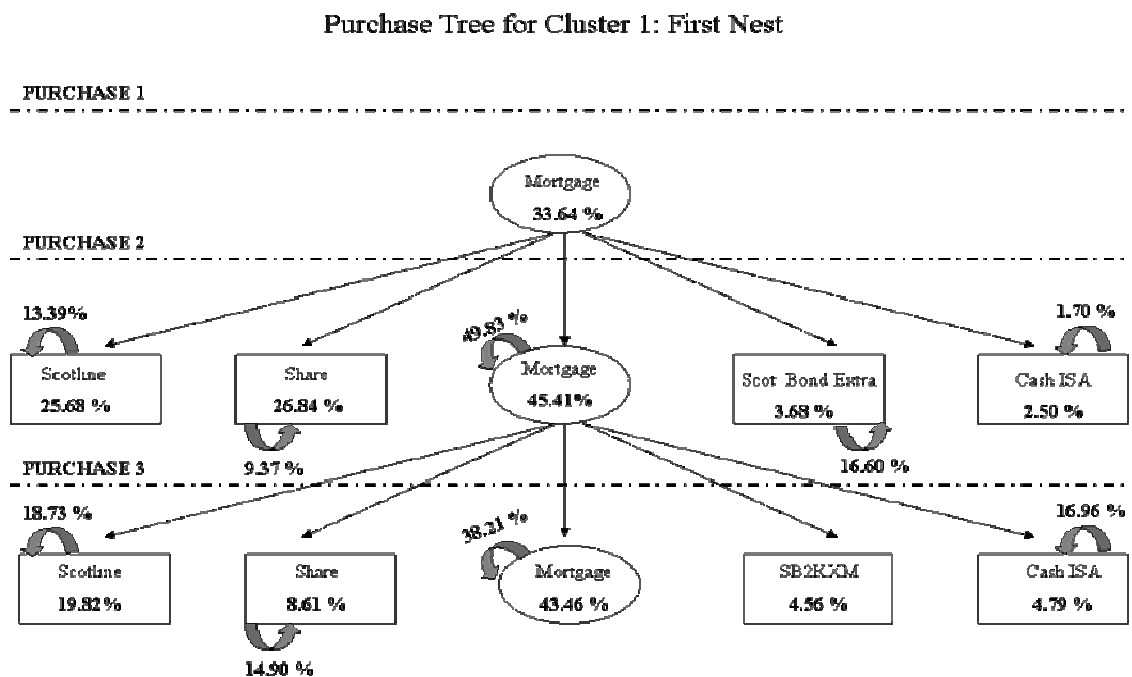


In order to get a better understanding of the consumption of First Nest<sup>79</sup>, the Purchase Tree (Graph 7.18) displays the evolution of its consumption across several purchases (the probabilities between products are expressed as percentage). As it could be expected from the previous results, mortgage products lead the consumption

<sup>79</sup> Due to the limited average purchase, the analysis has been limited to three purchases

with clear up-selling opportunities. Mortgages are followed by some investment products like Share and Scotline, with a significant proportion of the consumption apparently coming from cross-selling, due to the low up-selling probabilities of both products. Additionally, there are other products with a lower relevance like SB2KXM and Cash ISA completing the consumption. Despite the low acquisition levels, these products represent an alternative for the late stages in the consumption life cycle as their repurchase probabilities increase.

7.18: Company B Purchase Tree First Nest



Once the consumption path is stated, the objective now is to understand the Active Repurchase figures (see Graph 7.3). In doing so, it has to be highlighted that the challenging situation to retain customers active within Company B. After the first purchase, only 40% of customers acquire a second product. As if this situation is not bad enough, after the second purchase, the repurchase rate reduces further, to reach a value of just 35%. However, the repurchase percentages increase to 60% after the third purchase, which coincides with the acquisition of investment acquisition. After that, the fifth purchase reduces again, down to 50% of customers.



In conclusion, Company B is facing a significant challenge to remain customer active. The objective here is to engage customers in the first purchase, with a suitable retention strategy to benefit from the opportunities that First Nest will offer in the future associated to the investment acquisitions.

In order to investigate the best retention strategy, first the factors influencing the repurchase behaviour need to be understood. With this in mind, Logistic Regression is used. As it has been explained before, this technique is suitable when the dependent variable (Repurchase) is not continuous and, therefore, traditional Linear Regression Models cannot be used. Using Logistic Regression, repurchase behaviour for First Nest, can be modelled as follows (Equation 7.1)<sup>80</sup>:

$$\text{Logit (P(Rep}_{12}|\text{First Nest Purchase}))} = -0.61 + 0.051 \text{ Length Relationship} + 10.3 \text{ Prod1: Savings} + 10 \text{ Prod1: Investment} - 0.96 \text{ Mortgage}$$

(Equation 7.1)

The analysis of the model suggests that variables with a deeper impact on repurchase behaviour are the Length of the Relationship with a positive impact, and the previous product acquired. Actually, while Savings and Investment products have a positive impact on the repurchase behaviour for First Nest, between the first and second purchases, mortgages have a negative impact. This result is quite relevant for a segment of customers whose most acquired product is mortgages. In this situation, Company B should find an alternative strategy to promote consumption of mortgages.

It is also significant how, after introducing all the socio-demographic variables into the model, they do not seem to have any influence. Actually, just some of the variables featuring the relationship between First Nest and Company B are present.

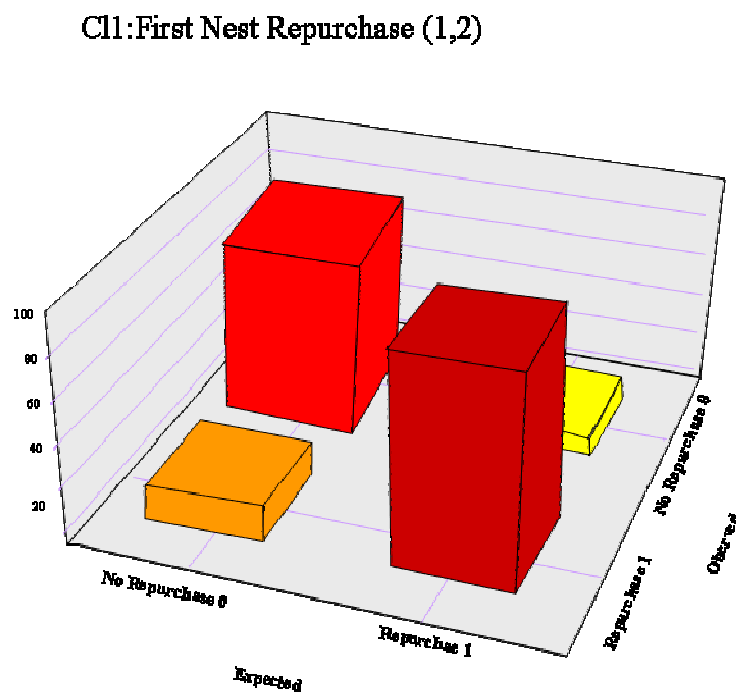
To validate the results obtained by the model, three main tools have been used. First, looking at Graph 7.19, an idea of the prediction power of the model has been given.

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<sup>80</sup> For individual coefficient validity values, see Appendix 4, Section 8.

The interesting outcome of this graph is that it determines the proportion of customers whose behaviour (purchase of a second product, or not) has been correctly predicted. Apparently, the results are quite promising as the proportion of customers expected to repurchase and why finally did they so is quite high<sup>81</sup> (around 80%). On the other hand, the figures are not so good for those expected not to repurchase how did not do so<sup>82</sup> (60%). This means that “leavers” or “passive customers”, should be analysed in depth to introduce their behaviour parameters within the model.

Graph 7.19: Company B Predictive Strength First Nest



In order to prove the validity of the model, the results of the training, validation and test samples need to be observed. As it has been explained before, a random division of the database was conducted and the analytical process was replicated on each subset in order to identify whether the results obtained are consistent. These results<sup>83</sup> are very similar and suggest a misclassification percentage of 36%, which mainly comes from the lack of precision at predicting the “no repurchase” behaviour. Therefore, it

<sup>81</sup> Box located on Expected Repurchase 1-Observed Repurchase 1.

<sup>82</sup> Box located on Expected No Repurchase 0-Observed No Repurchase 0.

<sup>83</sup> See Appendix 4, section 4

can be concluded that the population of First Nest is quite homogeneous and the model selected clearly represents them and their purchase behaviour, in a very sound way. Finally, the Likelihood Ratio used for the validation of the Logistic Regression (Table 7.5), shows that the null hypothesis by which the model covariates are zero, cannot be accepted given the value of the p-value.

Table 7.5 Company B Goodness of Fit of Logistic Regression First Nest

Likelihood Ratio	d.f.	P-value
36201.144	17	<0.0001

Still aimed at predicting repurchase behaviour, the same analysis has been conducted using the Cox Regression to take into account the influence of time on First Nest behaviour. The model obtained, after several attempts removing not significant coefficients and those highly correlated, is as follows (Equation 7.2)<sup>84</sup>:

$$\text{LHR (Rep}_{12}|\text{First Nest})(t) = -0.0055 \text{ Life of 1}^{\text{st}} \text{ product} + 0.0521 \text{ Length of Relationship}$$

(Equation 7.2)

From the model, it can be concluded that the variables with any impact on the repurchase decision of First Nest are the life of the first product<sup>85</sup> and the length of the relationship. Moreover, the life of the previous product has a negative impact. This means that long life products, or those which are kept for long periods of time, are less likely to encourage repurchase. This coincides with the results obtained from Logistic Regression and how Savings and Investments are usually products with a short life expectancy and have a positive impact on the repurchase behaviour and Mortgages and, on the other hand, had a negative influence.

To validate the model and its results, Table 7.6 displays a summary of the goodness of fit. From this, the conclusion is that the likelihood of the model increases by introducing covariates. Moreover, this difference is not only big in absolute value,

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<sup>84</sup> For individual coefficient validity values, see Appendix 4, Section 8.

<sup>85</sup> Length of time lapsed between the opening date and the closing date.

but also significant with a p-value<0.005. In conclusion, the model seems to perform well, which increases the confidence on the results obtained from it.

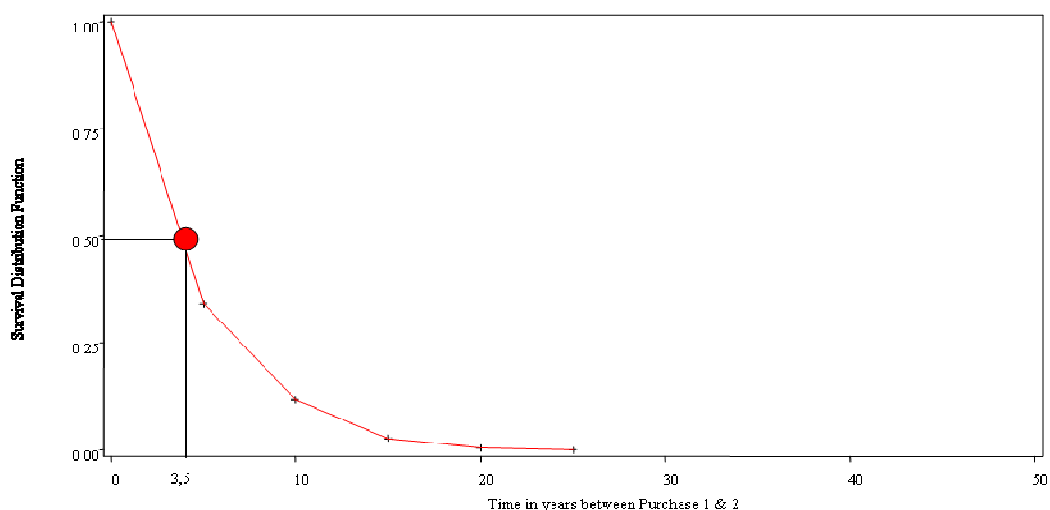
Table 7.6: Company B Goodness of Fit Cox Regression First Nest

	Value	p-value
- 2Log Likelihood	19319.947	<0.0001

### 7.5 The “WHEN” analysis for First Nest

The final part of the analysis aimed at understanding the purchase behaviour of First Nest customers consists of identifying the impact of time on the repurchase decision. In doing so, a Survival Curve has been fitted between the first and second purchase in this cluster. The graph (Graph 7.20) shows that the majority of repurchase decisions occur within the first five years, after the first acquisition. Actually, almost 70% of repurchases will have been made by then. After this initial period of rushing repurchase decisions, the purchase behaviour slows down significantly until the last purchase, which is made around 25 years after the first acquisition.

Graph 7.20: Company B Time Analysis First Nest



In conclusion, First Nest is a cluster which offers some interesting opportunities for Company B. As first property purchasers, “usually these customers are more likely to

remain loyal to the company”<sup>86</sup>, which means that the company has a good base to work on retaining them. However, some challenges in terms of repurchase have been identified mainly after the first and second purchases. Moreover, modelling the repurchase decision has discovered that products like mortgages (the most popular product for First Nest), have not got an encouraging impact on repurchase. Actually, the opportunities that they present are mainly concerning up-selling (re-mortgaging) which does not help too much for prospect acquisitions. Finally, in terms of time, the right moment to approach this segment and make effective those potential opportunities is within three years immediately after the first purchase.

### **7.6 The “WHAT” analysis for Young Savers**

Cluster 2 is constituted by the young pool from customers of Company B. Mainly located in Glasgow, Young Savers are mainly students who are in their late teens, but who have still not reached the legal age for acquiring mortgages and other more complex financial products. Their relationship with the company started when they were between 7-8 years old, which means that they have been with the company for at least 10 years. Basically Young Savers approach the company looking for alternative saving like, (Scotline or Young ScotSaver), using the account operators that Company B has. Their consumption rate (1.35 products on average) is the lowest, mainly due to legal reasons and to the lack of products specifically designed for this segment of consumers. In line with it, the average balance is also quite low, just over £1,000.

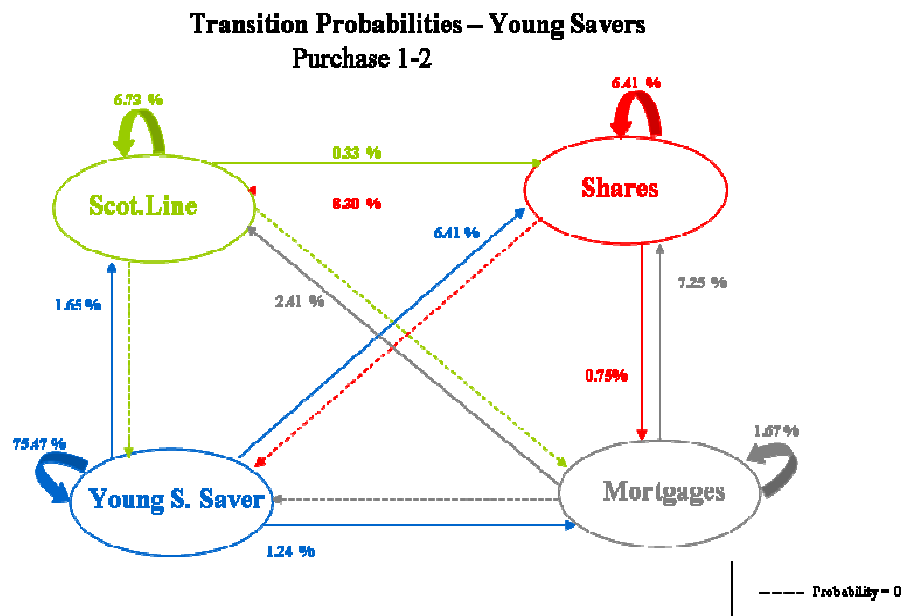
An analysis of Young Savers consumption (Graph 7.5) suggests a clear control by Scotline and Young ScotSaver in that, together, they account for around 80% of the first purchase. These two products present a similar decreasing evolution across the five purchases. Moreover, on the third purchase, they are taken over by products like Mortgages. This situation can be the result of these customers starting the transition into Cluster 1: First Nest by acquiring their first property.

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<sup>86</sup> Interview with Company E 30/11/2006.

The transition graph (Graph 7.21) shows the peculiarity of this segment of customers. For those relatively young (in their early teens), there are not many purchase options due to legal factors, this is why in some cases, the repurchase probability coming from the Young Saver is zero, or very low, when we refer to older customers, at the legal age, to acquire sophisticated financial products. As a result of this situation, it is not surprising the high repurchase probability of Young ScotSaver (around 76% of Young Savers acquiring the product on the first purchase, and acquire it again on a second acquisition). As a result of the specific characteristics of this product targeting young customers, it does not generate very significant cross-selling opportunities in other products. In conclusion, young customers do not have very many consumption opportunities in Company B, as they have to keep repurchasing either Young Scot. Saver or Scotline, until they are old enough to acquire other financial products. The idea of designing an intermediate product between the saving options for children and the mortgage products for adults, could increase the range of consumption opportunities of Young Savers and tighten them up to the company in their transition to more challenging acquisitions.

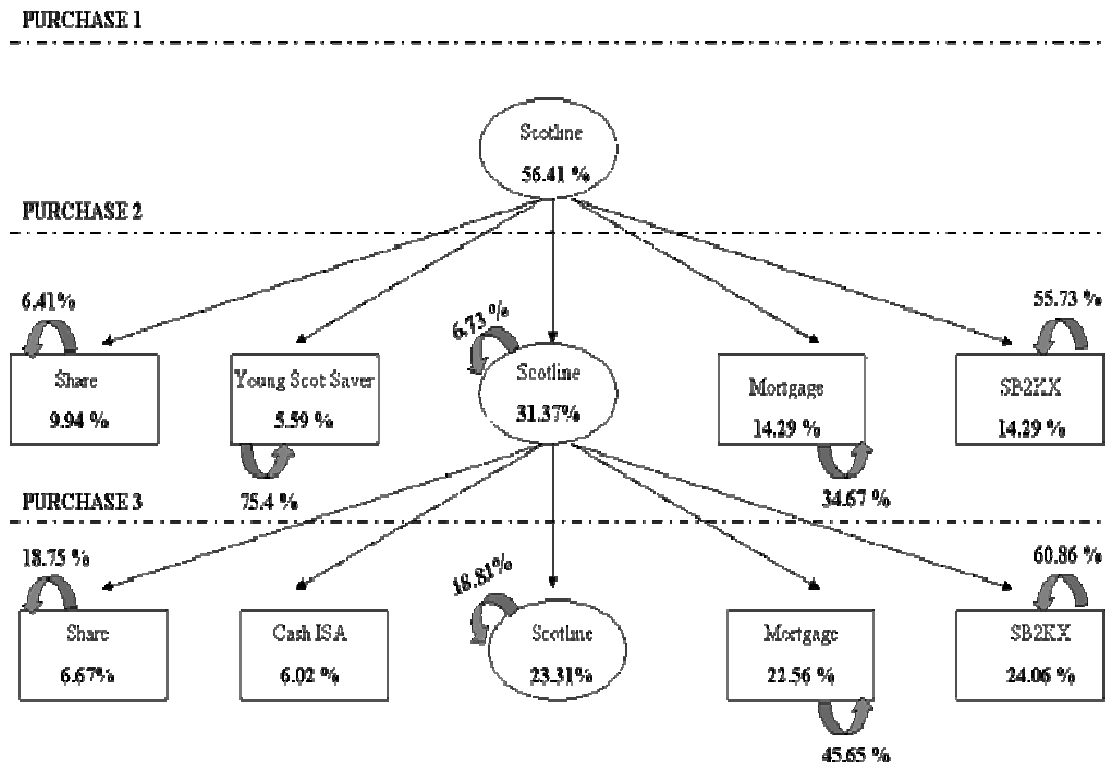
Graph 7.21: Company B Transition Graph Young Savers



With those ideas in mind, the objective here is tracking the consumption evolution across successive purchase for Young Savers.

Graph 7.22: Company B Purchase Tree Young Savers

Purchase Tree for Cluster 2: Young Savers



The purchase tree (Graph 7.22) shows the strong position of Scotline in the portfolio with over 50% of all acquisitions. However, this strength seems to reduce over time as purchases increase according to the fact that customers become older and they experience new financial necessities. In this evolution, while Scotline smoothly decreases and Young Saver disappears, products like Mortgages and SB2KX increase their presence in the portfolio. Moreover, these products seem to be very interesting as their repurchase rates are relatively high (35% and 56% respectively) and increase over time. In conclusion, Young Savers' consumption is based on two stages. On an early stage where customers are still under the legal age, consumption centres on Scotline and Young Saver. However, at the second stage, as customers grow, the products acquired change. In that way, more complex products can be found which respond to new realities that this segment of customers goes through. Based on this division, the cross-selling and up-selling opportunities are quite

straight forward. The challenge for Company B is to identify the moment when customers start their transition to the more advanced stage.

Although the analysis of Young Savers seems simple, it is a test for the company to retain if we look at the Active Retention figures (see Graph 7.7). From the graph it can be deduced that only 20% of customers acquire a second purchase. After that, the figures improve reaching a sustained value of about 40%. If we combine this result with the conclusions obtained before, the moment when the repurchase data improves coincides with customers starting to acquire other products (e.g. mortgages and investment products). Therefore, Company B is not offering an attractive alternative for young customers, but a more detailed understanding of their necessities should be undertaken. Above all, retaining them at that early stage means reinforcing their relationship with the company for future purchases where the active retention is higher.

One of the problems associated with this cluster is that buyers are not exactly the account holders. Basically, parents or other relatives acquire saving/investment products thinking of the future of their children, so this means that contact and relationships have been established between Company B and someone who is not the final user of the product. Due to this, the objective here is twofold: (1) creating an offer interesting enough to catch those relatives who want to help their children; and (2) trying to engage the final users of the product in a relationship with the company by offering advantages that young customers can benefit from.

The following step consists of understanding the repurchase behaviour by modelling it using Logistic Regression. From all the models tested using the Stepwise Variable Introduction Technique, the selected one (Equation 7.3<sup>87</sup>) looks like this:

$$\text{Logit (P(Rep}_{12}|\text{Young Savers}))} = 0.08 \text{ Length Relationship} + 3.34 \text{ Prod1: Savings} + 2.89 \text{ Prod1: Investment} - 0.82 \text{ Insurance}$$

(Equation 7.3)

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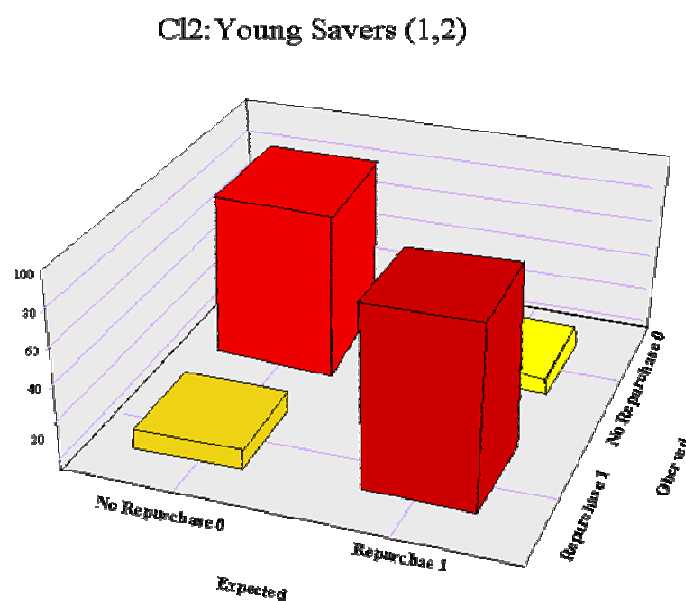
<sup>87</sup> For individual coefficient validity values, see Appendix 4, Section 8.



From the final equation it can be concluded that there are two significant variables: the length of the relationship and the previous product acquired. Moreover, the length of the relationship with Company B has a positive impact. This means that the longer customers have been part of the company, the more likely they are to acquire a second product. In terms of the impact of the previous product, it could be said that Savings and Investment product acquisition has a positive impact on the repurchase probability. On the other hand, Insurance products seem to discourage the consumption of a prospective product from Company B. Finally, it should be pointed out that Mortgages don't seem to have any presence in the model as their acquisition level is almost inexistent in the first purchase.

To validate the results, again, three different tools have been used. The first one is the Prediction Power Graph (Graph 7.23) which clearly states how good the model performs when predicting repurchases, by comparing expected and observed behaviours. From it, we can be very confident with the results obtained from the model. Not only does the model predict correctly around 80% of the expected repurchases (Expected Repurchase 1 and Observed Repurchase 1), but it also performs well on predicting No Repurchase (Observed No Repurchase 0 and Expected No Repurchase 0) on around 75% of the cases.

Graph 7.23: Company B Predictive Strength Young Savers



Another way to assess the validity of the model is by looking at the overall correct classification rate which is 77%. This means that out of 100 predictions, the model makes the correct forecast in 77 cases. Once again, the model might not be perfect as it cannot explain 100% of the individuals' behaviour. However, explaining 77% with just a couple of variables talks in favour of using the model to design effective retention strategies. In addition to the validation using the prediction power, the model can be validated by looking at the goodness of fit of logistic regression which tests the null hypothesis that all the covariates of the model are zero (Table 7.7). The p-value of the test clearly shows that, at a significance level of 0.05 and 0.01, the null hypothesis cannot be accepted; therefore, the covariates are statistically significant in the model.

Finally, the analysis of the training, validation and test sample also leads to the same conclusion. The values obtained<sup>88</sup> by replicating the analysis on these three sub-sets are statistically equal. This strengthens the capacity of the model to make general predictions on the behaviour of Young Savers without questioning to what extent this segment is homogeneous.

Table 7.7 Company B Goodness of Fit of Logistic Regression Young Savers

Likelihood Ratio	d.f.	P-value
39214.63	21	<0.0001

Continuing with the analysis of the repurchase behaviour, the objective now is introducing the impact of the time lapse between purchases. In order to do so we have used the Cox Regression techniques whose final model is as follows (Equation 7.4<sup>89</sup>)

$$\text{LHR}(\text{Rep}_{12}|\text{Young Savers})(t) = 0.0089 \text{ Length of Relationship}$$

(Equation 7.4)

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<sup>88</sup> See Appendix 4, section 5.

<sup>89</sup> For individual coefficient validity values, see Appendix 4, Section 8.

It seems that after introducing all the socio-demographic and consumption features, the only significant feature is the length of the relationship between the customer and Company B. More specifically, this relationship means that long term customers are more likely to acquire a second product than short-term customers. Although this solution has been already mentioned and validated before, the log-likelihood ratio is used to assess it (Table 7.8).

Table 7.8: Company B Goodness of Fit Cox Regression, Young Savers

	Value	P value
-2 Log-likelihood Ratio	1081.434	<0.0001

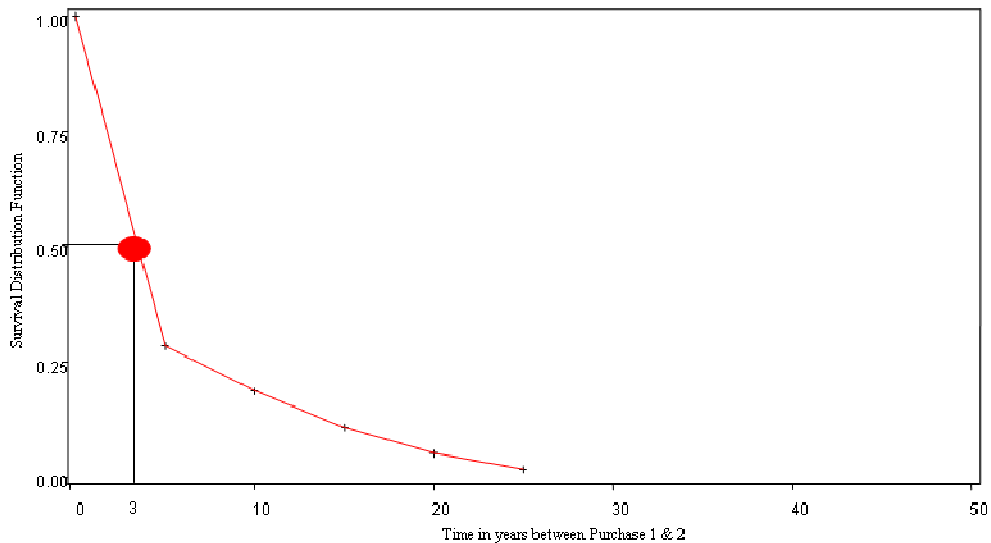
Again, in order to validate the results of the Cox Regression, the Log-Likelihood Ratio has been used. This test assumes as null hypothesis that all the covariates are zero if the p-value is greater than 0.05. By using the above figures, it can be determined at 95% and 99% of confidence levels that the covariates are significant in the model.

### **7.7 The “WHEN” analysis for Young Savers**

Finally, the Survival Curve (Graph 7.24) displays how repurchase probability distributes as time goes by. This will give an idea of the best time framework when customers should be contacted in order to maximise the repurchase probability. Actually, it seems that around 75% of purchases occurs within three years of the first purchase. The other 25% distributes across time until the last purchase has been made, some time after 25 years, since the first product was acquired.

Graph 7.24: Company B Time Analysis Young Savers

**CL.2 Young Savers Survival Curve Purchase (1,2)**



**7.8 The “WHAT” analysis for Heavy Investors**

A third of the clusters identified in Company B’s database. This segment is a special case of the consumption pattern within Company B. It is even more relevant as this group represents almost 42% of the customer base, becoming the most popular segment, known as Heavy Investors. The average age of the members in this cluster is 35 years, although the first purchase happened almost 15 years ago, when they were in their early 20s. The consumption of Heavy Investors is located in the two biggest cities of Scotland (Glasgow and Edinburgh), using the branches of the company. Heavy Investor, whose professional activities can be characterised as the Blue Collar group and shows a clear preference for Investment products, basically focused on Scotline.

Although these customers have the longest life/experience with the company (15 years), their consumption is one of the lowest, with just 1.46 products, along with their low balance (£3,370) in comparison with the other clusters. What is relevant from this analysis is that this numerous cluster should have a stronger relationship

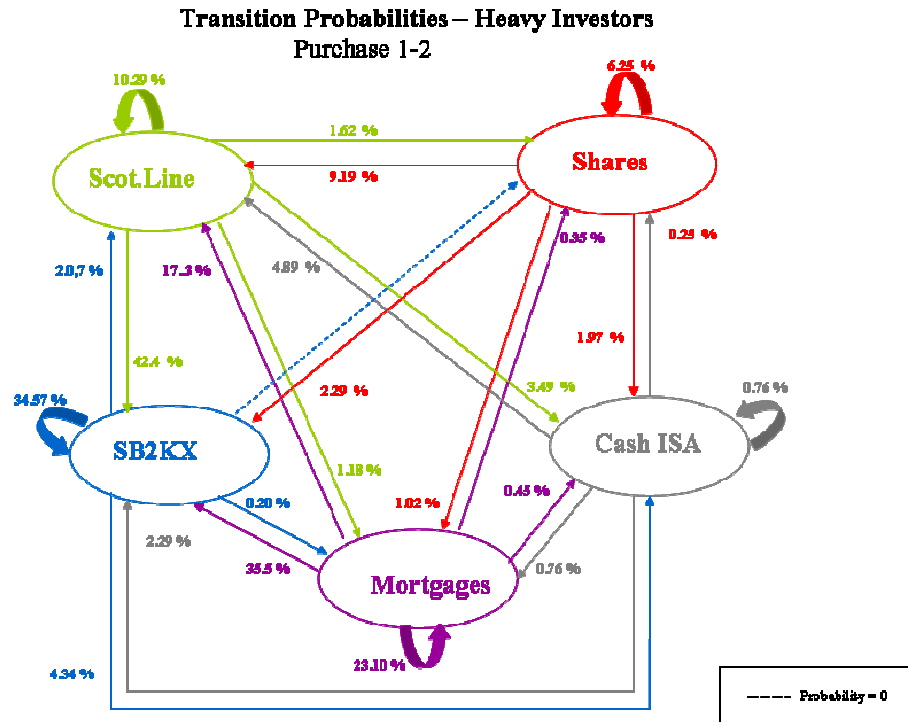
than those clients with a shorter time in the company, has a low consumption rate and balance. This situation shows clear potential opportunities that the company is apparently missing. Above all, when Heavy Investors are reaching their financial product consumption peak, higher consumption rates would be expected. Moreover, the type of product acquired, mainly investment products, do not justify that low consumption rates could be more understood for products like Mortgages.

In order to dig into Heavy Investors' consumption, Graph 7.9 displays the preferred products from the five purchases analysed. From it the conclusions highlight the relevance of investment products (Scotline, SB2KX). While Scotline slightly reduces its relevance in the basket after the first purchase (although it keeps leading the consumption), SB2KX increases from 5% of the acquisition, in the first purchase up to over 20% in the fifth purchase, reaching that fifth purchase head-to-head with Scotline. The evolution of Mortgages is also significant. As the second most acquired product during the first three purchases, Mortgages reduce after that moment, together with customers' age and their necessities and realities. Other products like ScotPlus, Share, Cash ISA and Tessa ISA, remain of secondary relevance with low purchase rates.

A better understanding of Heavy Investors and how their consumption inter-relates between products can be obtained by using the Transition Graph for Heavy Investors (Graph 7.25). From it, it can be concluded that inter-connections between products are not strong. Rather than this being a negative result, it helps focus the consumption of this cluster on highly specific products. Actually, the only significant relationship between products comes from Scotline to SB2KX (with a probability of 0.42), which suggests a natural consumption path. In addition to this, and in line with the consumption evolution of Heavy Investors, after the acquisition of Mortgage Products, those customers who do not continue in the same product category, move into investment, acquiring Scotline (probability = 0.17) or SB2KX (probability = 0.35). Apart from this investment characteristic on cross-selling opportunities, we can find clear up-grading and up-selling chances. Those mainly come from the three most popular products, Scotline (0.10), Mortgage (0.23) and SB2KX (0.35). In

conclusion, it can be suggested that Heavy Investors do not offer a huge amount of cross-selling opportunities, and are the only ones centred on investing products which also lead the up-selling portfolio.

Graph 7.25: Company B Transition Graph Heavy Investors

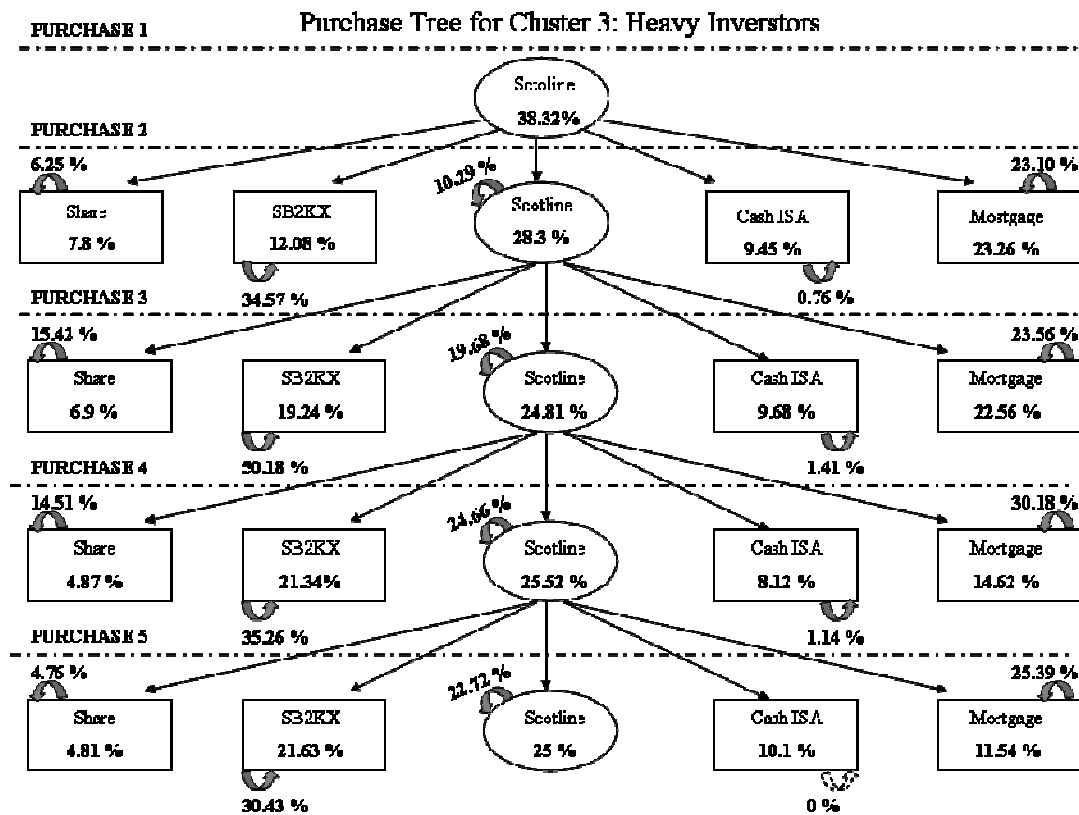


Finally, the Purchase Tree for Heavy Investors (Graph 7.26) illustrates again the same results as previously obtained. In this way, Sctoline is recognised as being the most acquired product with a repurchase probability that increases over time. Although Scotline does not lose its leadership at any point of the purchase cycle, its consumption rate decreases until it stabilises on the last two purchases. The same decreasing progression can be observed for Mortgages in both up-selling and absolute terms. While these two products follow this pattern, there is a product which continuously increases its presence in the basket, with a big impulse at the beginning and a moderate growth over the final purchases: SB2KS. It is also remarkable that the high repurchase rates associated with SB2KX, which finally supports the idea of a segment of customers, who are clearly focused on short life investment products. Finally, the analysis concludes with Shares and Cash ISA. If they complete the overview of Heavy Investors' consumption successfully, their presence in the

portfolio is residual with a combined 15% across the different purchases, and very low up-grading figures.

Out of this exhaustive analysis it seems clear that the name selected for this cluster “Heavy Investor” is based on sound reasons. Actually, analysis after analysis has proved the preference of this cluster for acquiring investment products over other consumption options. Moreover, these investing products are the receivers of cross-selling opportunities and the generators of up-selling chances. All this emphasis on investing without any link on what other customers of their age, and older, consume, before and after, suggests the fact that there is a kind of market niche for young customers. This niche would be integrated by young customers with clear preference for investing their spare money. If this is the case and based on the size of the cluster (almost 42% of the customer base), it could be concluded that for a large proportion of customers, Company B is, above all, an investment products provider over other options, for instance savings and mortgages.

Graph 7.26: Company B Purchase Tree Heavy Investors



To finish with, the analysis of Heavy Investors purchase figures, the attention is now focused on the Active Repurchase Values. From Graph 7.11, the challenge that this segment represents for Company B can be observed. Actually, just over 20% of Heavy Investors acquire a second product with the firm, which states the value of missing potential opportunities is around 80% of customers. This is quite worrying due to the fact that Heavy Investors is the most popular segment of customers. After this difficult purchase, the figures improve with a slight drop after ‘purchase three’ to reach a value of around 60% of customers acquiring another product after the fourth purchase.

The following part of the analysis consists of understanding the repurchase decision in more detail. In order to do so, and in the same way that it has been done before, Logistic Regression has been used to end up with the following model (Equation 7.5<sup>90</sup>)

$$\text{Logit P}((\text{Rep}_{12}|\text{Heavy Investors})) = 1.26 - 1.28 \text{ Length Relationship} + 0.22 \text{ Prod 1:Investment} + 0.075 \text{ Prod 1: Insurance} - 0.14 \text{ Prod 1: Mortgage} - 0.11 \text{ Life 1st Product}$$

(Equation 7.5)

The equation clearly points out, previous consumption characteristics over socio-demographics, those which really impact on the repurchase decision of Heavy Investors. First, the Length of the Relationship with Company B has a positive impact, so the longer customers have been with Company B; the more likely they are to acquire a second product. Moreover, the previous product characteristic also has a strong influence. When customers have purchased a Mortgage as the first product, the repurchase is less likely (negative impact). However, the acquisition of Insurance and above all Investment products increases the probability of customers buying a second purchase. This result reinforces the idea suggested previously about Investment products being the products generating more business opportunities for this cluster. Finally, the life of the first product has a negative impact on the repurchase probability. This means that products with a long life (like a mortgage),

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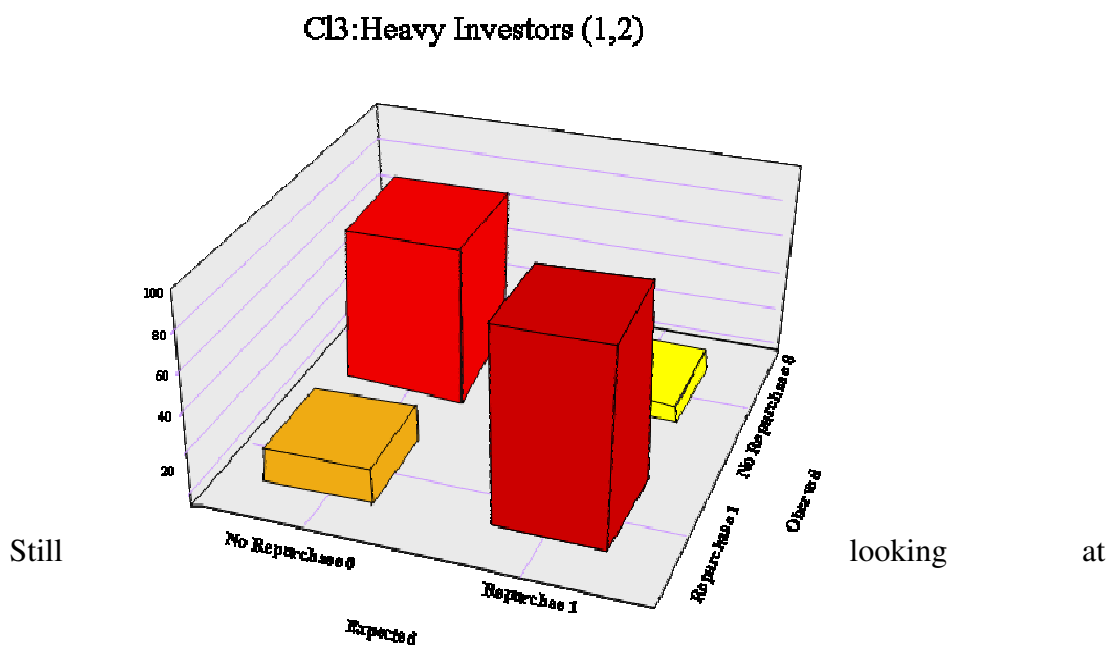
<sup>90</sup> For individual coefficient validity values, see Appendix 4, Section 8.



do not increase the likelihood of customers acquiring a second policy, whilst others, with a shorter life or annual renewals, do increase. This result is a combination of the conclusions extracted before and suggests that Heavy Investors are not looking for a long relationship with a provider, but actually, the defection of customers after the first purchase which is quite high and where the retention only improves after few purchases. Therefore, a segment of customers highly orientated towards “fast” products, with an expected high return, do not bond to the company too much.

In terms of the validation of the model, Graph 7.27 displays the predictive power of the final solution. As happened with previous clusters, the performance of the model is very high on predicting Repurchase (Expected Repurchase = 1 and Observed Repurchase = 1). This means that over 80% of customers expected to acquire a second purchase actually buy a second product. However, if we look at the Not Repurchase decision, the model is not as sound at predicting it. In this case, over 60% of customers who were expected not to acquire a second product did not receive it (Expected No Repurchase = 0 and Observer No Repurchase = 0). As it has been already suggested, a deep analysis of customers not acquiring a second purchase would be recommendable in order to have a complete picture of both sides of the repurchase decision.

Graph 7.27: Company B Predictive Strength Heavy Investors



validating the results, the correct classification rate of the model reaches a value of almost 73% (72.73%)<sup>91</sup>. This suggests that for every 100 customers, 73 have been correctly predicted in terms of their repurchase decision. Again, it could be argued that although the model is not perfect (with a correct classification rate of 100%) the value obtained is high enough to accept its predictive validity. In addition to this and according to the goodness of fit of the Logistic Regression (Table 7.9), the covariates of the model are all statistically different from zero, as the p-value of the test is less than the significance level (0.05).

Table 7.9 Company B Goodness of Fit of Logistic Regression Heavy Investors

Likelihood Ratio	d.f.	p-value
28958,31	16	<0.0001

Finally, in order to assess the homogeneity of Heavy Investors as a cluster, the results of the training, testing and validation sub-samples have been compared. Their analyses<sup>92</sup> do not show significant differences between the values; this means that it validates the model and also the homogeneity of the cluster.

Following the original structure, the objective now is to understand how time effects on the repurchase decision in order to design a time framework for Heavy Investors. Using Cox Regression as the Survival tool to tackle such objective, the solution that we ended up with is as follows (Equation 7.6<sup>93</sup>):

$$\text{LHR}(\text{Rep}_{12}|\text{Heavy Investors})(t) = 0.1070 \text{ Prod.1: Investment} - 0.002 \text{ Life First Product}$$

(Equation 7.6)

From the above model, it can be concluded that, again, socio-demographic variables have apparently no impact on the repurchase decision as they might be already included in the segmentation initially carried out. However, the characteristics of the first product and its lifespan are significant in the model. In this case, the life of the

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<sup>91</sup> See Appendix 4, Section 6

<sup>92</sup> See Appendix 4, Section 6

<sup>93</sup> For individual coefficient validity values, see Appendix 4, Section 8.

first product has, again, a negative impact which reinforces the conclusions obtained from the logistic regression. However, in opposition to the previous analysis, the length of the relationship has not been included in the model. This result is slightly surprising as it has been constant in all the models produced before. However, it has been suggested that Heavy Investors are, apparently, not looking for a relationship with the organisation, at least not at the first stage of their consumption. This could be a possible interpretation of the final model obtained from the Survival Analysis. If that assumption is correct, Company B should reconsider the parameters of the current relationship with Heavy Investors, as they do not seem to find them valuable.

In order to assess the validity of the model, Table 7.10 shows how the log-likelihood of the model has a p-value no greater than the significance level of 0.05. Therefore, this proves that the covariates are statistically different from zero and as a result should be included in the model.

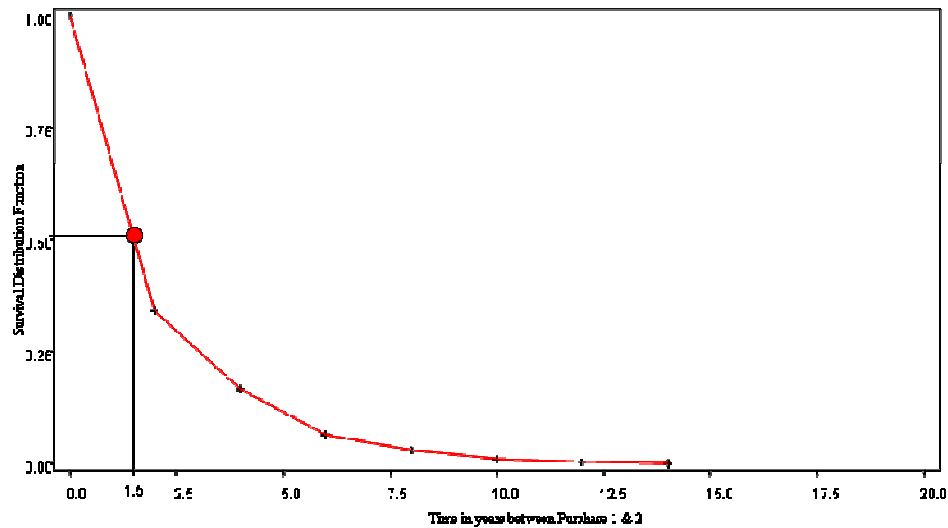
Table 7.10: Company B Goodness of Fit Cox Regression Heavy Investors

	Value	P value
(-2) Loglikelihood Ratio	17171.964	<0.0001

### **7.9 The “WHEN” analysis for Heavy Investors**

Finally, the last part of the analysis of Heavy Investors consists of identifying the effect of time that we have modelled before. The survival curve for Heavy Investors (Graph 7.28), clearly suggests the preference of this segment for short life products. Actually, 75% of customers acquiring a second product have done so within two years of the first purchase. Moreover, 50% of “re-purchasers” buy their second product within a year of the initial acquisition. In comparison with the other clusters, Heavy Investors have a faster consumption sequence. This also can be observed from the length of the tail which shows the longest time taken for customers to acquire a second policy. For Heavy Investors, that tail is the shortest out of all the clusters (around 14 years in opposition to 25 from Young Savers).

Graph 7.28: Company B Time Analysis Young Savers



### 7.10 The “WHAT” analysis for Future Planners

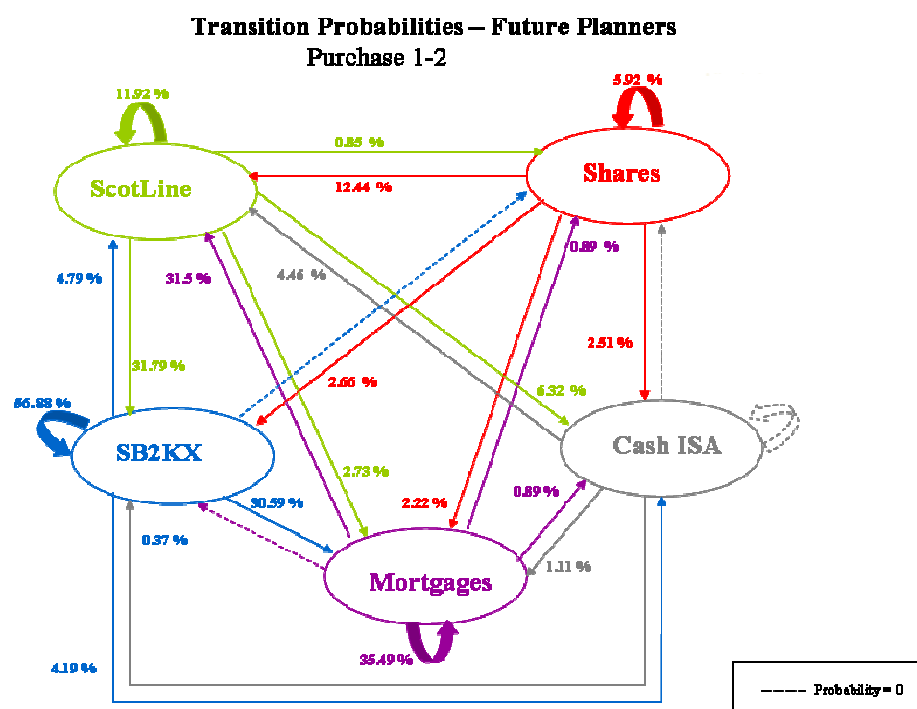
The final cluster, called Future Planners, represents 17.69% of Company B. This group represents relatively mature customers (58 year old), who acquired the first product at the beginning of their 50s, suggesting a relationship with the company lasting around a decade. Future Planners are mainly located in the areas of Glasgow and Aberdeen and are basically related to managerial activities. Their consumption is basically made through branches with a clear orientation towards investment products (mainly Scotline). Although their average consumption rate is not the highest, it is quite elevated (1.71 products). However, Future Planners present the highest balance with around £8,000 (£7,922). In conclusion, this is a segment of customers who acquire high value premiums. Looking at their consumption life cycle, at that age (early-mid 50s), customers use to be free of mortgage charges and expected to be without dependants. Therefore, they are on a stage with high spare income and a clear necessity to ensure their future.

The analysis of consumption presents, again, a clear preference for investment products (Graph 7.13). Scotline leads consumption across the five products with a clear distance from other purchases. A second product to appear for the first time in their consumption life is Share which, after a strong start in the basket, reduces to values close to 5%. In contrast with other clusters, Mortgages do not seem to be a

firm competitor against Scotline. Finally, as was expected from a previous analysis, SB2KX increased their consumption rates from a low position (5%) rising towards other products, when they make their last purchase with a value of 20%. Another product that has an increasing trajectory is Cash ISA and up to a rate of 10%. Finally, other products with relatively low consumption rates that complete the basket of Future Planners are Tessa ISA and ScotPlus.

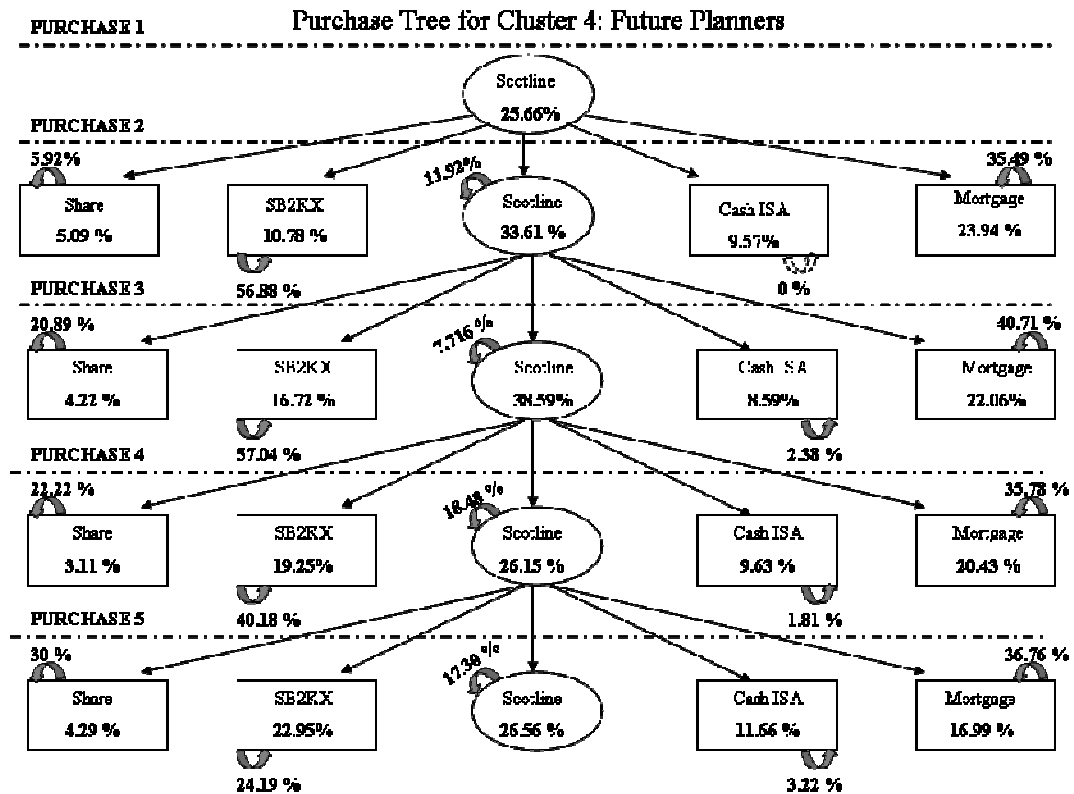
In order to confirm the conclusions obtained before, the Transition Graph (Graph 7.29) shows inter-connections between products and how consumption moves from product category to product category. In the cross-selling area, the products that receive more attention for other categories are both Scotline, and SB2KX from Mortgages and Shares. This clearly reinforces the relevance of Investment for Future Planners. The up-selling section, again SB2KS, offers higher up-selling opportunities with Mortgages in second place and Scotline following them. In summary, Scotline keeps a leading role in the consumption of Future Planners at the beginning of the relationship with Company B, receiving some cross-selling opportunities, while SB2KX, in a secondary position, not only is highly acquired by customers who purchased other product categories before, but also by those previously purchasing it. Whatever the case, it seems pretty clear that Investment products are the real target for Future Planners when making decisions about their retirement.

Graph 7.29: Company B Transition Graph Future Planners



To conclude the consumption analysis of Future Planners, their Purchase Tree (Graph 7.30) shows how product acquisition evolves across the five purchases analysed, together with the probabilities associated with each product to be further acquired. At the top of the tree, Scotline is located for being the most acquired product. The similarity between the consumption of Scotline and Mortgages is relevant at the beginning of the relationship. This can be explained in terms of the customers' life cycle and their transition: from Cluster 1 (First Nest and their Mortgage acquisition) to Cluster 4 (Future Planners and their emphasis on Investment). From then on, both products (Mortgage and Scotline) remain fairly significant in the portfolio although they follow a decreasing path. However, while Mortgage remains there due to up-selling (high self repurchase probabilities), Scotline also remains there, based on customers coming from other products. In addition to those, SB2KX presents an opposite pattern with a constant growth. This not only comes from the high self repurchase figures, but as it was proved, its growth responds to cross-selling from other products. The other two products with any significance in the Family Planners' basket are Shares and Cash ISA. Both remain quite constant on their consumption figures across the purchases, but they manage it using different strategies. Shares consumption bases itself on self repurchase (up-selling) while Cash ISA seems to use cross-selling, as it is not a product that generates high repurchase probability from previous customers.

Graph 7.30: Company B Purchase Tree Future Planners



As Heavy Investors, Future Planners, show low active retention figures (see Graph 7.15). Company B is, again, struggling to have just over 30% of customers acquiring a second purchase. As it has become a norm from previous analysis, the repurchase figures improve considerably after it (to reach 50% of customers), and remain fairly constant until the fifth purchase suggesting a kind of loyalty to the company. The advice to Company B goes in line with improving customer experience during the first purchase in order to facilitate as many repurchases as possible.

Aimed at investigating a bit more on the repurchase decision, several models have been tested using Logistic Regression in order to predict customer behaviour. In doing so, the final model has been selected (Equation 7.7<sup>94</sup>).

<sup>94</sup> For individual coefficient validity values, see Appendix 4, Section 8.

$$\text{Logit (P(Rep}_{12}|\text{Future Planners}))} = -0.132 \text{ Length Relationship} + 0.86 \text{ Prod 1: Investment} + 0.44 \text{ Prod 1: Mortgage} - 1.31 \text{ Prod 1: Insurance} - 0.02 \text{ Starting Age}$$

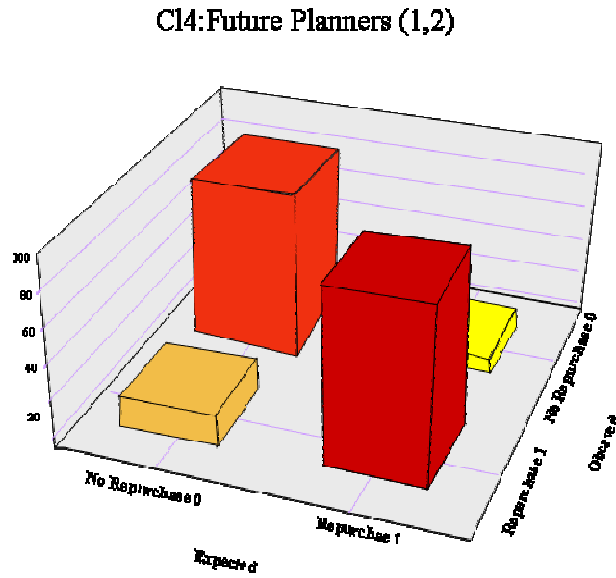
(Equation 7.7)

Future Planners present a complete new model of repurchase behaviour in terms of the model which best explains their repurchase. On one hand, the length of the relationship has a negative impact. This means that, the longer customers have been with Company B, the less likely they are to buy a second product. A possible reason for that can be found in the maturity of customers. As they become more mature, their preparation time for retirement is limited so the sooner they start acquiring suitable products the better. Again, it can be observed how product categories influence the repurchase decision. Investment and Savings act as promotion for other products. Finally, another significant feature of the model is the Starting Age which also has a negative effect on the repurchase decision. A possible explanation is that as customers start acquiring products when they are very mature, their probability of repurchase reduces due to the limited scope of time, as mentioned before.

The validation of the results first comes from Graph 7.31, which, in line with previous results, suggests quite a convincing and sound model. The repurchase prediction power is quite high: around 80% of customers expected to repurchase (Expected Repurchase = 1) finally acquire a second policy (Observed Repurchase = 1). Although the No Repurchase decision also seems to be well predicted, the correct allocation of probabilities is not so good. Actually, about 60% of customers were predicted as not repurchasing (Expected No Repurchase = 0) do not acquire a second policy (Observed No Repurchase = 0). In general terms, it looks like the model performs quite well although a bit more precision could be asked for in the prediction of “no-repurchasers”.



Graph 7.31: Company B Predictive Strength Future Planners



In addition to the graph, we count on the Correct Classification Rate to assess the validity of the model. In this case it reaches a value of 70%, a bit lower than for Cluster 2 (Young Savers) and Cluster 3 (Heavy Investors), but over the value of Cluster 1 (First Nest). The result translates into 70 out of 100 customers' purchase behaviour being correctly predicted. As mentioned before, it might not be perfect, but it is high enough to be confident with the results obtained from the model.

Finally, the objective is to test the homogeneity of the customers categorised as Future Planners in order to make sure that the predictions made about their behaviour are applicable to the entire segment. This objective has been addressed by comparing the values of the parameters measured for the training, validation and testing samples<sup>95</sup>. From it can be concluded that Future Planners is quite a homogenous segment as the values in the three sub-samples remain fairly similar. Therefore, the model built during the training stage, can be used to generalise repurchase conclusions about the whole group of Future Planners. Finally, to complete the validation of the Logistic Regression Model, the likelihood ration (Table 7.11)

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<sup>95</sup> See Appendix 4, Section 7

proves that the covariates included in the model are statistically different from zero (p-value less than 0.05).

Table 7.11 Company B Goodness of Fit of Logistic Regression Future Planners

Likelihood Ratio	d.f.	p-value
13851,79	18	<0.0001

Continuing with the repurchase decision, now Cox's Regression has been used in order to address the influence of time on Future Planners' repurchase behaviour. After trying several models, the one selected is the one summarised in Equation 7.8<sup>96</sup>.

$$\text{LHR}(\text{Rep}_{12}|\text{Future Planners})(t) = 0.042 \text{ Prod. 1: Investment} - 0.072 \text{ Life 1st Product} \\ - 0.049 \text{ Length of Relationship} - 0.017 \text{ Starting Age.}$$

(Equation 7.8)

In the same way the results were obtained from Logistic Regression, the peculiarity of the repurchase factors for Future Planners has been demonstrated. First, we have found the expected positive effect on the first product acquired, which is reinforced by the strong up-selling opportunities uncovered before. Secondly, the life of the previous product has a negative impact on the repurchase decision; therefore the acquisition of products with a short life promotes the acquisition of a second product. Moreover, the length of the relationship has, again, a negative sign. Hence, long term customers are less likely to acquire a second policy. According to this result, a negative influence of the Starting Age with Company B has also been found. Younger customers within this segment are more likely to repurchase than older ones. All these results seem to reinforce the proposition as suggested before, about Future Planners having a limited time to prepare for their retirement and therefore to acquire their products.

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<sup>96</sup> For individual coefficient validity values, see Appendix 4, Section 8.

After exploring the model and its implications, the next step consists of assessing to what extent the results withdrawn from it are valid. To answer that question, Table 8.12 shows how the p-value of the likelihood ratio is less than 0.05. This means that the model has been properly specified as the covariates included into the model are statistically different from zero.

Table 7.12: Company B Goodness of Fit Cox Regression Future Planners

	Value	p value
-(2)Loglikelihood Ratio	6268.339	<0.0001

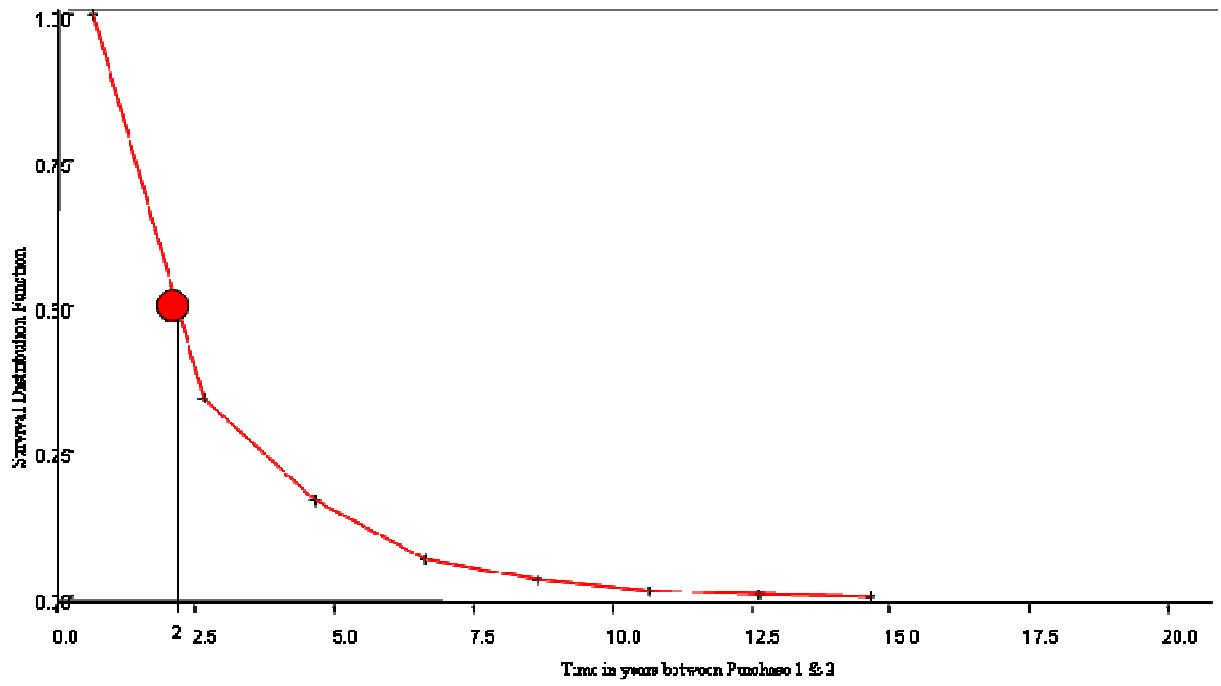
### **7.11 The “WHEN” analysis for Future Planners**

The final result extracted from the Survival analysis is the Survival Curve (Graph 7.32) which represents how the repurchase probability changes as time goes by. It can be suggested why the consumption rate is very fast during the 2.5 year gone after the first purchase<sup>97</sup> (almost 35% of repurchases have been done). Actually, 50% of customers acquiring a second policy have done so within the two years after the first purchase. After the second year, the repurchase decision slows down across almost 15 years, taken for the last re-purchaser to acquire a second product. In conclusion, Future Planners seems to be a very fast cluster concerning the decision of acquiring a second product from Company B. This result confirms the appreciation suggested before, about Future Planners being concerned with time and its limitations.

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<sup>97</sup> The slope is greater than in other section of the graph.

Graph 7.32: Company B Time Analysis Future Planners



**Conclusion:**

This chapter has provided a practical example to design tailored cross-selling and up-selling opportunities for Company B applying the “WHO-WHAT-WHEN” framework. The analysis was started by running a segmentation exercise in order to identify whether within Company B’s database there were significant differences that would justify different repurchase strategies given the differences in the consumption patterns. By taking into account socio-demographic and purchase decisions, four clusters were finally elected as the best split to represent the singularities of the customers. The segments were named according to the characteristics of their members as: First Nest, Young Savers, Heavy Investors and Future Planners.

Following the “Who” analysis, the next step was addressing Research Question three concerning the suitability of developing specific cross-selling strategies for each cluster rather than opting for a more generic approach of a common action plan. This question was finally answered using a double approach: 1) Homogeneity test of the consumption across clusters, which was rejected; and 2) Markov Chain Process fit, which proved that future consumption is not independent of past acquisitions and that this dependency changes over time. Consequently, it was proved that each cluster was not only different in terms of its members, but also in terms of their consumption habits and the time when those purchases took place. At this point, it could be concluded that the “Who-What-When” framework made sense to identify cross-selling and up-selling strategies for Company B and how they should respond to the main characteristics of customers and their position in the Life Cycle Theory.

After approaching Research question three, the next sections have focused on developing the What and When analysis for each of the clusters in order to identify what products customers of each cluster were more likely to buy next, over a five purchase scope. Additionally, if identifying the products was important, being able to predict when those acquisition times are more likely to occur resulted in being very useful as a component of meaningful retention strategies, maximising the probability of cross-selling and up-selling.

With this practical application of the “Who-What-When” framework, the second case study has been finished. As a reminder, it started with Chapter 6, where some qualitative research was conducted in order to test the importance of retention (research question one) and of cross-selling as a vehicle to retain customers (research question two) in the UK Building Society industry. Following this second case study, Chapter 8 will focus on translating the results of the application of this “Who-What-When” framework into businesses’ strategies for both case studies, as a way of showing how the results could be interpreted into the organisations’ environment to define those cross-selling and up-selling strategies (research question three).

**Chapter eight**  
**Customer Retention &**  
**Cross-selling:**  
**Overall Results**

## **Introduction**

The two case studies, split over four chapters, have followed a combined approach of qualitative and quantitative research mixing accordingly deductive and inductive methods. The main aim of that research process was to address the relevance of customer retention in the financial services industries (research question one), evaluate cross-selling strategies as the vehicle to retain customers (research question two) and to develop tailored strategies, not one common cross-selling strategy taking into account customer characteristics, consumption patterns and purchase times, using the “Who-What-When” framework (research question three). Given the amount of information and evidence obtained, this chapter is aimed at summarising the results and providing an overview of the implications of the results of the research questions.

The chapter is divided into four sections; the first and third sections will review the results of the comments and evidence provided to demonstrate that customer retention is one of the key strategies which financial companies have started to embrace. Additionally, it will evaluate one of the possible routes to achieve that retention, which is, at the same time, highly valued by the respondents: cross-selling. Once those propositions have been properly stated, sections two and four will translate the application of the “Who-What-When” framework into specific cross-selling and retention recommendations.

### **8.1 Relationship Marketing and Cross-selling in the Spanish Insurance Industry:**

From the demand point of view, the market is offering lots of opportunities for insurance providers ([www.ine.es](http://www.ine.es) visited on 15<sup>th</sup> August 2008). In addition to this, “the increasing sophistication of the financial consumer is demanding more complex insurance products (i.e. specific commercial, accidents and health insurance policies)” (Marketing Manager, Company C, May 2005).

From the interviews and the analysis of the industry, it seems very clear that the Spanish Insurance Industry is very competitive. Moreover, companies have tried



very aggressive strategies to attract new customers based on cost leadership rather than in differentiating their offers (Valverde *et al.*, 2005). Therefore, the customer has become more sensitive about price, e.g. looking for the best (lowest) price for a service that they consider is standard. As a consequence, the traditional inertia of remaining with the same insurance provider just because of the administrative hassle is blurring. Actually, some providers have introduced into the market very innovative business models (i.e. Línea Directa, the Spanish equivalent of Direct Line), offering a more simplistic view of transactions which are captivating a large proportion of the market ([www.icea.es](http://www.icea.es) visited in 10<sup>th</sup> January 2008).

Companies are starting to realise the impossibility of continuing with this cost leading strategy as it does not warrant survival. The problem here is identifying the right differentiation element to move customers into their offer. Insurance companies have realised that such a question can be easily answered by listening to and understanding customers ([www.mapfre.es](http://www.mapfre.es) visited on 15<sup>th</sup> January 2008 – Fundación Mapfre). Currently, companies have begun to restructure their organisations by moving away from product orientated strategies turning into customer focused courses of action (Company C website, visited on 27<sup>th</sup> January 2007).

Overall, the Spanish insurance industry has woken up from a passive status quo and is reacting to new trends observed in the market. “Currently, customers are segmented based on their consumption habits and one of the main discriminatory factors on the consumption of financial products: age. Despite the fact that this approach is not very sophisticated and ends up “forcing” customers to fall into broad categories, its progress has to be recognised its progress from previous attempts” (Marketing Director, Company A, May 2006). Another area where the need for getting close to the customer can be perceived is on the proliferation of more agile distribution/contact channels ([www.icea.es](http://www.icea.es), Annual Report, 2008). “Our society is living in the digital era and, every day customers are getting more used to the Internet and on-line commerce. As a consequence, insurance providers have to put their products on the net and facilitate quotations, complaints and consulting

processes making them more accessible through call centres and their web-sites” (Market Research Manager, Company A, April 2005).

Companies are not only trying to understand and increase satisfaction for their customers, but through conversations and interactions, they continuously take on board the concept of retaining and engaging customers in stronger relationships. “For example, companies have begun to produce newsletters and magazines to inform their customers about the organisation and new products or services. In addition to this, companies are getting more involved with their communities – when they

operate on a regional basis - or with national events by sponsoring sport activities and other cultural occasions. All those activities, apart from providing large exposure, are used as good reasons to contact customers” (Research Director, ICEA, December 2006).

From all the benefits derived from building long-term relationships with customers, one of the most pursued objectives is to enlarge the number of products that customers acquire from the same provider (Salazar *et al.*, 2007). The answer to this goal comes from designing effective and meaningful cross-selling and up-selling strategies. Companies and organisations are aware of the advantage of customers acquiring more than one product. First is the high cost (also in terms of time and effort), which can be shared between several products. Secondly, by having more reasons for contact with the customer, companies can get a better understanding of customers’ needs and how to satisfy them (Peelen and Knowalczyk, 2000). In addition to this, customers are more open regarding their needs and expect a more “tailored” proposition for those needs without being so susceptible to the price (Market Research Manager, Company C, September 2006). This starts proving how cross-selling and up-selling are not only interesting strategies from the view of the organisation, but also have a positive impact on customer satisfaction.

In the specific case of Company A, Relationship Marketing and cross-selling strategies have a definitive impact on its future strategy. The regional scope of

Company A's and its relatively small size in comparison with the biggest players of the country suggests the suitability of adopting niche strategies. This approach requests a clear understanding and definition of the target market. This knowledge can only be gathered by getting close to customers and promoting the flow of information mentioned before. This size limitation also has an impact on resource availability to negotiate with collateral service providers and to sometimes obtain the best deals. As a result of this, its policies can be slightly less competitive than those which bigger companies offer. However, if there is an existing relationship, customers "will perceive us as a caring provider who will give to them the right solution to their financial needs even if we are not the most competitive provider. It is not just about price, it is about trust". (Marketing Director, Company A, May 2005)

In terms of cross-selling and up-selling, along with the rest of the players of the Spanish insurance industry, Company A embraces the benefits of having customers acquiring several policies "Market Research Manager, Company A, April 2005). In addition to this, across the analysis of the database and the conversations maintained several product interconnections have been identified. Some of those are basically forced by the market conditions, e.g. home insurance and life insurance associated to mortgage acquisitions, but there are other interrelations that are the result of more natural factors such as the link between savings/pension plans and health insurance policies<sup>98</sup>. Understanding relationships between products and the role played by products (driver or follower) is crucial in order to design effective cross-selling strategies that will match the needs of several groups of customers. The fact that Company A is part of a financial group with a strong financial services provider (the so called Financial Institution "FI" for this research) puts more emphasis on understanding customer product consumption and its evolution. Actually, due to the fact that some products are highly correlated to the channel (i.e. home insurance and FI linked to the mortgage), the allocation of resources and expansion plans will be dependent upon how sales divide across channels. Finally, being able to predict the consumption, based on customers' circumstances, could help Company A to develop

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<sup>98</sup> See Purchase Trees, Chapter 5

new products in collaboration with the FI in order to give a more comprehensive response to customer's needs.

Despite the fact that cross-selling and Relationship Marketing are perceived as key strategies for the future of the industry, there are still some limitations. Apparently, the highest positions of the organisational hierarchy are already committed to these concepts. However the organisational culture is not something that can be changed from one day to the next, it is a long process and it cascades down until it covers all aspects of the organisation, and will take some time. Furthermore, technical solutions together with adjustments in the current IT systems, represent a high investment and a decision has to be made very carefully to result in having the right solution (Research Director, ICEA, December 2006). It is not surprising that, due to the success rate of this type of solution, companies have reluctantly stepped back to begin such investment.

In conclusion, the role of Relationship Marketing in the Spanish Insurance Industry is perceived by its members as paramount and with a growing importance as companies begin adapting their systems, organisational culture and staff attitudes to a more customer centric business model. From all the approaches associated with Relationship Marketing, insurance providers consider that enlarging the consumption portfolio per customer, via cross-selling and up-selling, is a very adequate strategy in order to promote customer loyalty and protect their current customer base.

## **8.2 Retention strategies via cross-selling and up-selling for Company A:**

The segmentation analysis has clearly proved that a universal retention strategy for Company A's customers would not be appropriate due to the significant differences that can be found among the customers. Actually, for this company the variables with the strongest discriminatory power are age, followed by the first product acquired, the professional occupation of customers and the length of the relationship as an active customer. The final solution represented four clusters: Risky Youth, Family Projects, Mature Milk Cows and Potential Jack Pots, different enough to justify an individual consumption analysis. Based on such analysis, the purpose now is

designing specific retention strategies using cross-selling and up-selling as the tools to promote customer retention.

#### 8.2.1 Risky Youth:

This segment is clearly attracted by the Risk/Life insurance product that, as explained by the Marketing Research Manager, “is a product acquired as a complement to other more strategic products such as car insurance (low coverage of the car insurance policy) or home insurance (to complete the mortgage negotiation)”. Due to the fact that the second most acquired product for this segment is home insurance, it seems clear that this group of customers is involved in the acquisition of their first property. Therefore, the clear cross-selling strategy will come from linking Risk/Life insurance and Home Insurance at the beginning of the consumption. In addition to this, a Risk/Life insurance policy offers a significant up-selling opportunity, prior to the acquisition of car insurance during the third purchase. This improvement of the conditions on the life insurance policy will complete the limited coverage that the standard car insurance provides in the event of death. Due to the strong presence of home insurance policies, it seems quite normal that the preferred channel is the FI, which normally negotiates the conditions of the mortgage.

It should be highlighted that this cluster does not seem to perceive Company A as an insurance provider. The two main products acquired during the first two purchases are linked to each other and associated to the acquisition of a third product (the mortgage) using a channel completely detached from the organisation itself. The explanation for this lack of recognition might be that as customers acquire those two policies in combination to the other product from the FI, it might take some time before they realise that the service is eventually provided by Company A.

Another factor that provokes some concern is the fact that this young group of customers, a natural market for the acquisition of a car insurance policy, do not use Company A for such a purpose until the third or fourth purchase. Looking at the price and conditions of the car insurance policy from Company A, they do not differ from the competitors’. Therefore, the lack of acquisition of this cluster might be the

result of customers not recognising Company A as a car insurance provider. In order to turn this situation over, Company A should try to make an extra effort with young customers to promote the full range of products that the firm also provides.

Looking at the impact on repurchase of socio-demographic variables, it can be concluded that age has a negative impact on the repurchase position, this means that the older customers are, the less likely they are to acquire a second policy. Finally, profitability has a positive effect on the decision of acquiring more products from the firm. Actually, Gold customers are the clients who are more likely to acquire a second policy. This suggests that customers allocated in different profitability segments receive different service levels which have an impact of future repurchase decisions.

The effect of time on the repurchase decision suggests that 75% of Risky Youth acquiring a second policy does it within 1.5 years from the acquisition of the first policy. This indicates that the segment effectuated its repurchase decision relatively fast, at least during early consumption.

To summarise, the retention strategy designed for Risky Youth consists of a double approach. First, Company A could continue to benefit from cross-selling Risk/Life insurance policies in combination with Home insurance policies associated to the acquisition of mortgages that, logically, will be negotiated through the FI channel. In addition to this, Risk/Life insurance policies offer some up-selling opportunities after the purchase of Home insurance, in preparation for the extra cover needed for the standard car insurance policies. All these opportunities will happen quickly after the acquisition of the first policy. Therefore, Company A should start some kind of direct contact with the members of this cluster in order to: 1) promote the effective transformation of those opportunities into real sales and 2) help customers identify Company A as the provider behind the FI.

The second approach suggests a focus on activating the consumption of car insurance policies within Risky Youth. Although these customers are acquiring risk/life

policies from Company A, they are not doing so with car insurance. Moreover, an early attraction of those customers might result in many more opportunities for the rest of the consumption life of Risky Youth. In order to make this strategy work, Company A could either make an extra effort by building the image of a general insurance services provider, or by contacting the members of this segment with clear information about the other services that they can get. The former can be very costly but on the long run it might help building a recognised value proposition. The latter although more cost controlled, has the advantage of having a deeper impact on the segment that can eventually produce benefits. Whatever option is selected, the main objective focuses on reinforcing the image of Company A as a general insurance services provider, away from the financial institution.

### 8.2.2 Family Projects:

The attraction product for Family Projects is the home insurance policy, due to the fact that this segment is formed by customers in their early 30's who are about to start acquiring their family property. This product offers clear up-selling opportunities during the second and third purchase. During the second purchase, Risk/Life insurance policies appear as the second most acquired product. The significance of this product category might easily refer back to the relationship previously explained between Home insurance, Risk/Life insurance and Mortgages. Actually, looking at the preferred channel, those two products are acquired through the FI. It will not be until the third purchase when Car insurance takes off by becoming the most acquired product. It is at this stage when FI channel decreases, favouring the raise of the Direct Channel as the preferred option for the rest of the consumption life of Family Projects. From the analysis of the premium evolution it can be deduced that the third premium, associated with car insurance policies, presents a significant growth in comparison to the previous two<sup>99</sup>. As a result, it seems that Family Projects could be quite keen on up-grading the conditions of their car policies offering up-selling opportunities to Company A. Finally, during the fifth purchase, consumption moves towards Savings and Pension Plans which become the most acquired product aimed at preparing one's retirement.

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<sup>99</sup> Its value (€350) is higher than the average standard car insurance policy (€200)

The repurchase decision is influenced by several factors. As with the previous cluster, Age has a negative influence on the repurchase decision. As customers get older, they are more likely to have their financial needs already arranged with another provider. The length of the relationship has a positive impact on the repurchase decision implicating that the longer that customers have been within the organisation the higher is the probability of repurchase. Finally, the first product acquired and the profitability of Family projects determines the probability of acquiring another policy from Company A.

The time scope for consumption of Family Projects is a bit longer than that for Risky Youth. Actually, 75% of second purchases are made within two years from the first policy. However, the time horizon for successive purchases increases with an average of five years between each purchase.

To recap, Family Projects can be defined as a segment of customers interested in acquiring high value policies. As their financial situation improves, they show a tendency to up-grade their existing policies in order to end up with products that will finally satisfy their exquisite needs. The approaching strategy for this segment must be focused on suggesting ways to upgrade the conditions of current existing policies. Moreover, it can be observed that, again, there is a dependency from the FI during the first two purchases. In order to improve Company A's recognition amongst its customers, an additional effort should be done to link customers and users. This activity of keeping customers informed and linked should be done continuously. However, actions aimed at promoting the acquisition of other policies has to be conducted with more parsimony: within two years from the first acquisition and slightly longer for subsequent purchases. Due to this longer time gap between purchases, the need of finding a way of getting closer to customers becomes even more crucial for the strategic retention of Family Projects. The message to transmit should move towards offering speciality services and features of their policies that will fit the peculiar and high value insurance requirements.



### 8.2.3 Mature Milk Cows

Although this segment is the smallest in terms of size, it is one of the most interesting in terms of profitability. The issue here regards for how much longer this segment will have financial needs.

The consumption pattern of Mature Milk Cows focuses on two main products with a clear common denominator: preparing for their future. The first product on the consumption list is home insurance (as an investment opportunity/ retirement property). In opposition to previous segments that acquired their home insurance through the FI, this cluster prefers the Direct Channel for their first product acquisition. It looks like Company A has a strong reputation as a home insurance provider amongst the more mature population.

The second product of significant relevance for Mature Milk Cows refers to Savings (the equivalent Pension Plans). The acquisition of this product makes sense due to the age of the segment. However, as the retirement age in Spain is 65, the fact that this segment acquires this policy when they are well over this age, suggests that there must be a pension plan purchased previously. If that is the case, it seems that the Savings policy from Company A could be a secondary policy to make use of any spare income by this segment. In opposition to the previous purchase, this product is mainly acquired through the FI channel. To some extent, this makes sense because of the primarily financial nature of this policy type. If home insurance policies offer some up-selling opportunities, the case of Savings is even more significant as over 90% of customers acquiring Savings policies select this product category for prospective purchases.

In order to identify cross-selling opportunities, the product interaction analysis are results very useful. While in the previous analysis, Risk/Life policies played a paramount role as complementing product, for Mature Milk Cows this product is secondary. In opposition to Family Projects where Home insurance policies acted as the trigger for the acquisition of car insurance, for Mature Milk Cows the relationship works on the other way around. Actually, it looks that apart from this

strong link between Car insurance and Home insurance, there are no many cross-selling opportunities, therefore, the strategy required to encourage the link between Company A and Mature Milk Cows is based on up-grading the conditions of already acquired policies.

The repurchase decision of this segment is clearly influenced, by the channel of the first purchase. Actually, the direct channel has a strong positive effect on the repurchase decision, stronger than the financial institution. In addition to this, again age has a negative impact, which means that the older customers are, less likely to acquire a second purchase. At the same time, the age of these customers when they acquired their first policy from the company also had an effect. By this, it can be said that the younger customers start a relationship with Company A, the more likely they are to repurchase. Finally, customer profitability has a significant effect on the repurchase decision making Platinum customers more likely to purchase more policies from Company A.

In terms of time, 75% of Mature Milk Cows acquiring a second purchase have done so within three and a half years from the first policy acquisition. As it has been discussed before, as customers become older, their probability of repurchase reduces, and if the average lapse of time between purchases increases, the likelihood of increasing customers' portfolio is negatively affected.

In conclusion, Mature Milk Cows is a very interesting segment for Company A due to their income and preference for high value policies. Moreover, the fact that they select the direct channel for the acquisition of the first product shows that, at least for this cluster, there is a link between company and customers. However, the advanced age of customers, the secondary character of the products that these customers acquire and the increased inter-purchase lapse in relation to previous clusters threatens this potential profitability. The recommended strategy to retain Mature Milk Cows consists of trying to approach customers that can be part of this cluster before they already are, by offering them the benefits of Company A products (mainly Home insurance and Savings). In addition to this, because of the tendency

showed in terms of up-selling, the message to transmit should go around improving the conditions of existing policies introducing all the speciality specifications that would increase value and coverage for customers.

#### 8.2.4 Potential Jack Pots:

This final cluster is the second biggest segment of customers identified in Company A's database. The value of this segment relies on the fact that these customers offer great opportunities for growth. Actually, if it was suggested that for Mature Milk Cows, the need to approach them before becoming members of such a cluster, it could be said that Potential Jack Pots should be the target. They are in their mid 50's with an average relationship length of five years, still working and with relatively high value premiums.

The consumption evolution of Potential Jack Pots presents a situation where Car insurance leads the first purchase followed closely by Home insurance showing, again, a change of roles in opposition to younger clusters' consumption. The third product that takes part in the basket is Savings, which clearly takes off on the fifth purchase. It looks like it is not until customers reach a mature age that they perceive the competitiveness and benefits of acquiring products from Company A. This relationship is even more interesting due to the fact that this segment also acquires their first products using the direct channel over other channels. This means that there is a clear identification of the provider that is not dependent on the financial institution. Moreover, even when Potential Jack Pots start acquiring Savings policies, traditionally negotiated through the financial institution, the direct channel remains as the preferred one. This continuous preference for direct contact with the organisation suggests a certain degree of relationship between customers and Company A.

Regarding the up-selling opportunities, both Car insurance and Home insurance show strong repurchase figures. This could be explained by the need of up-grading the existing policy and, therefore, it would be the result of pure up-selling. In addition to those two products, Savings is also a policy that presents high repurchase

figures. Almost half of the customers who acquired a savings policy on the previous purchase, acquires it again. This value increases over time and almost 85% of customers who bought a savings policy on the fourth purchase buy another on the fifth purchase. This continuous acquisition of Savings policies from Company A might indicate either the explicit need of Potential Jack Pots to warrant their future stability.

The analysis of cross-selling opportunities takes, again, a strong link between car and home insurance policies. This relationship is quite significant due to the fact that they are the most important strategic products that Company A is trying to promote. Therefore, during the first three repurchases, cross-selling activities will be primarily found on the interconnections between Car and Home insurance. However, as customer become older, their financial needs move towards the acquisition of Savings. These policies are receiving the interest from Potential Jack Pots.

An important concern related to this last segment of customers is active retention, in terms of repurchase figures. Despite the fact that repurchase remains constant (30% of customers acquiring another policy during the first three purchases), this figure reduces across the final two purchases. As mentioned before, it is at that moment that Savings policies get into the portfolio. In the time that Potential Jack Pots take to move into savings, their age is closer to the retiring age. This suggests that Company A cannot be the only provider of pension plans for Potential Jack Pots. Therefore, Company A is not taking full advantage of the potential of this product.

Following the analysis of the repurchase decision, this is, again, highly influenced by age with a negative impact. Supporting this argument, customer age when starting the relationship makes an impact, suggesting that the younger they are, the more likely they are to acquire another policy. In addition to this, profitability is also present in the repurchase decision, being platinum customers those with the highest chance of increasing their portfolio. Finally, the length of the relationship with the company has a negative effect.

A more detailed look at the effect of time on the repurchase decision proves how it takes longer for Potential Jack Pots the acquisition of subsequent policies. Actually, 75% of customers purchasing a second policy do so within five years from the purchase date of their first policy from Company A. Remaining this proportion constant, by the time that this cluster reaches the third purchase, customers are over 65 and most likely are retired and their financial needs, already sorted.

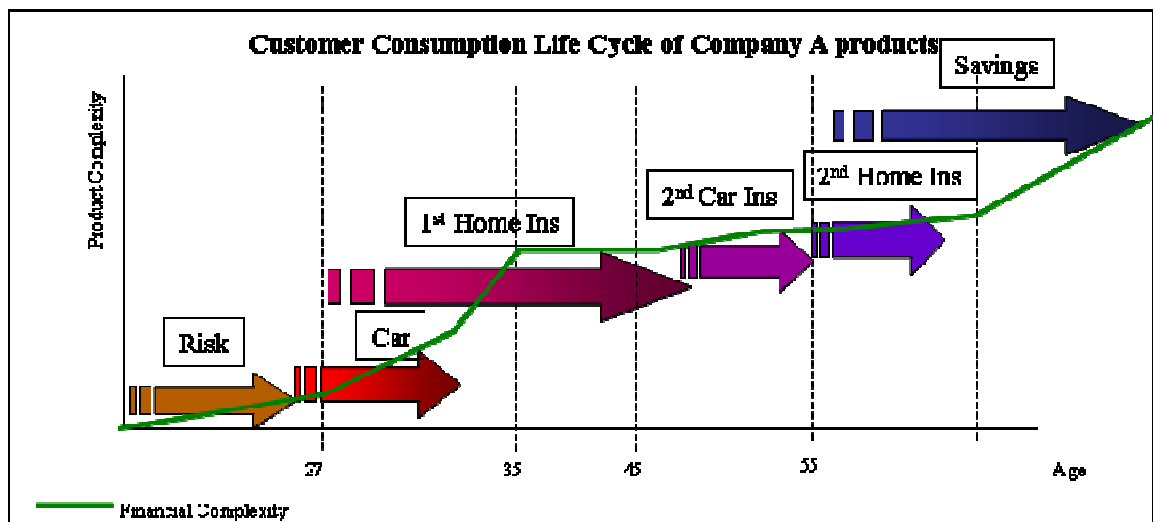
As a consequence, Potential Jack Pots is a highly interesting cluster for Company A, due to their relatively high profitability and preference for high value premiums. Moreover, the use of the direct channel, as the selected channel across the five purchases, analysed clearly states a stronger link between the company and these customers, which was not so defined on the rest of the customers. Potential Jack Pots' consumption focuses on three strategic products that offer high growth probabilities in the Spanish insurance industry such as car, home and savings policies. Each of the three products offers up-selling opportunities. While, in the case of Savings, those opportunities are clearly coming from up-grading the conditions of existing policies, Car and Home insurance policies are a combination of obtaining higher value policies and also of transferring their policies from other insurance providers to Company A. The only problem associated to this cluster is the large inter-purchase lapse of time. As a result, Company A should approach Potential Jack Pots early as they are in their late 40s, promoting the high value conditions of their policies and the special extras that they can enjoy. In addition to this, since the beginning of the approaching strategy, Company A should inform this cluster about its Savings policies. This will reinforce the image of a solid savings policy provider for Company A could be extremely important to an ageing market.

#### 8.2.5 Consumption Life Cycle Company A

The combination of the features of these four clusters and their consumption habits allows an understanding of the consumption life cycle of Company A's customers. The following figure (Figure 8.1) makes reference to this cycle, combined with the financial maturity of customers. On the horizontal axis, customer age has been displayed by putting together the average age of each cluster and the inter-purchase

time from the Survival Analysis. The vertical axis displays the complexity of products, based on explanations received from the Company. The size of the arrows represents the length of time that the specific product acquisition can be open.

Figure 8.1 Company A Customer Consumption Life Cycle



From the figure, it can be concluded that at the beginning of their financial consumption life, customers from Company A move towards the acquisition of Risk/Life policies. The second product to come along is car insurance. Although this is an interesting strategic product, still the policies' premiums are quite low given that policy holders just have started their professional life.

The first big jump into the financial maturity of customers arrives with the home insurance that is acquired as a result of the acquisition of customers' first property and its mortgage. Also mentioned is how it is quite normal to find that risk/life insurance policies are negotiated at this moment. This combination of the acquisition of these three financial products categories (mortgage, home insurance and live insurance) and the relevance of the investment effectuated justifies the increase in financial maturity. This period covers the late 20's to the late 30's, which has considered the time when young customers start building their households.

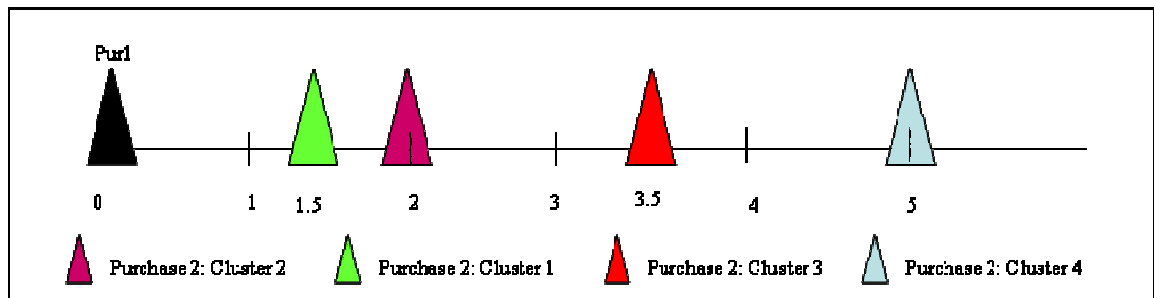
During these three purchases, the potential benefits for Company A basically come from cross-selling products. However, as the analysis continues, there is a second

phase where cross-selling is overtaken by up-selling. In this way, the fourth policy refers to car insurance. This will be according to the financial situation of customers who are in their mid 40s, till mid 50s, would reach their financial and career peaks. Here, customers do not go for the simplest policy allowed by legislation, but they try to increase the value of the policies introducing more complexity in the product and profits for the company. The last product of this second stage goes back to home insurance associated to the acquisition of a second property which is used as either as holiday home or as an investment. Obviously, this focuses on investing and clearly points out towards a stronger maturity in terms of the acquisition of financial products. As it has been shown across the individual cluster recommendation, these last two products – a second car or a second house - are associated with high value policies proving the sophistication of the customers acquiring them.

The final product coincides with a new stage where there is a combination of cross-selling and up-selling opportunities. Once customers have satisfied their need to protect their second car and/or house, the proximity of the retiring age starts influencing their financial decisions. As a consequence, savings policies start to appear in the portfolios in order to protect their future during retirement. As a result of this, savings policies have a cross-selling origin. However, as customers get older, they continue investing their money in several pension plans which produced impressive up-selling figures. The fact mentioned before about Company A not being the main provider of pensions plans for its customers, along with the evidenced high repurchase, clearly suggests the maturity peak of customers at this age.

Finally, due to the differences identified, not only in terms of products acquisition, but also in terms of purchase times, the following figure (Figure 8.2) shows the repurchase decision, over time, for the four clusters identified by Company A. It represents how long it takes after the first purchase, to acquire a second policy to 75% of the members of each cluster.

Figure 8.2: Company A Inter-purchase timing per cluster with 75% of the purchases done (purchase 1 and 2).



It can be deduced from the figure that Risky Youth (Cluster 1) are the quickest to make the repurchase decision, taking them just one and a half years to acquire a second policy. This one is followed by Family Projects (Cluster 2) who need six months more than the youngest customers. Cluster 3 (Mature Milk Cows) and Cluster 4 (Potential Jack Pots) present more dilated inter-purchase lapses. Actually, while Mature Milk Cows seem to need three and a half years to acquire their second product (more than twice the time expected of young customers), Potential Jack Pots are more relaxed in their repurchase decision with an average of five years since they negotiated their first policy with Company A.

### 8.3 Relationship Marketing and Cross-selling in the UK Building Society Industry:

The analysis of the financial industry in the UK has gone through a very turbulent period over the last three decades. First, between the end of the 70's and the beginning of the 80's, a deregulatory process took place (Speed, 1990). As a consequence, financial services firms were allowed to provide to their customers a wider range of products independently of the denomination of the firm (Barners, 1985). Moreover, the local character of institutions was also deleted favouring a broader competition. The resulting situation allowed financial companies to compete in different product categories and areas. What was a protected market with a regional scope, was left wide open to raw competition. As it can be expected, this movement affected building societies that have lived without any intrusions until that moment. In general terms, the introduction of competition manifested the



inefficiencies of the operational models used by building societies ([www.bsa.org](http://www.bsa.org), visited in 10<sup>th</sup> January 2007). In particular, the largest building societies were able to mitigate those attacks from banks and other financial services providers due to their size and customer base. Actually, due to their dimension, they became too big to be considered of any interest for any banks to takeover. In the same way, and because of opposite reasons, the smallest building societies were relatively safe from this situation as their small dimension and regional focus did not present any interest to the banking industry. Alternatively, the more effective building societies were, those of medium size are, big enough to be potentially attractive, but still small enough in terms of investment requirements (Marketing Director, Company D, November 2006).

The sudden introduction of competition along with the size advantage of banks, marked a clear expansion in the market for these financial providers and left building societies deeply shocked (Tayler, 2005). They had to witness how banks increased their market share by attracting customers offering more versatility, more innovative products and convenience: “the fast food of the financial industry” (Executive Director, Company B, February 2007). The regional and protected situation prior to deregulation has favoured the coexistence of numerous small building societies who could only survive in a protected environment. In order to compete and, as a defensive mechanism, building societies started a merging process. Although there have been moments of reduced activity in building societies coming together, this process has been alive for the last two decades and it is expected to continue in the near future (PR Manager, Building Societies Association, December 2006).

Together with the acquisitions and mergers processes, the environment of building societies has suffered a third course of action: demutualisation. As another result of the inability to compete, the Building Society Act (1986), allowed building societies to become limited companies if at least 75% of their members voted for this. The plausible growth and profitability observed in banks, encouraged building societies to reconsider their ownership model. In 1989, the first demutualisation took place (Abbey National) followed by another ten demutualisation processes until 2005. The

majority of this activity took place in the late 1990s, but since then, it has slowed down. There were several reasons for such an impact in transformation in the business model. First, in the last decade of the 20<sup>th</sup> century, only a few of the larger building societies had found their growth limited, based on the statutory organisational principles. Along with the need of attracting more capital from the corporate market and by the possibilities in the stock market, the concept of “mutuality” fell into a kind of crisis by which the foundational mission and principles started to blur (Marketing Director, Company D, November 2006; PR Manager, Association of Building Societies, November 2006). All this eventually favoured that some building societies moved towards a limited company model.

Finally, in the last decade, competition in the industry had suffered another shake by other factors. First, the effect of globalisation can be perceived in the industry as allowing international companies to operate within the UK and relocate the UK’s industry to capitals around the world. Second, introduction of the Internet and the progress of IT have provided the tools to simplify process and become more competitive. Finally, non financial providers have realised the potential benefits associated with the financial industry and have started to provide their own range of financial services (Tesco, John Lewis, Sainsbury’s). It has to be noticed that despite the fact that their current products are not very sophisticated, they count on the advantage of having a well established and recognisable brand image and more continuous contact with customers than traditional financial services providers.

Demand also suffered a significant evolution. Customers have become more sophisticated in their financial needs (Harrison, 2003). This has provoked them to be more demanding in terms of the conditions and service that they require from their financial providers. Along with this sophistication, customers become everyday more literate in financial issues. They no longer need to rely blindly on a financial service provider to select the most suitable services (Business Development Director, Company B, September 2006). Actually, they count on several information channels, favoured for the promotion of transparency in the industry, which allows them to be up-dated and compare between offers. Aimed at bringing transparency in the

industry, the Financial Service Authority (FSA) was created in 1985<sup>100</sup>. The combination of the FSA and self-awareness of customers is making customers take a central role. It can be said that, to some extent, there has been a transfer of power in the industry. Now customers are more aware of their role and the power of their position, and are learning how to make good use of it.

This sophistication and the standardisation of offers from financial services providers have forced companies to realise the need for developing a strong brand image and social responsibility strategies, “aimed at revitalising the idea of connecting companies with their customers by strong identification bonds”(Company D, Marketing Director, November 2006). By linking customers with their financial providers, building societies count on a strategic advantage lacking in other financial institutions. The ownership model characterised by not having external stakeholders owning the company, but customers who generate certain degree of interconnection (PR Manager, Association of Building Societies, December 2006). Actually, customers are the owners, they have their scope in the decision making process and finally, they are the ones to satisfy. The convulsion in the industry and relying on traditional consumption inertia has made building societies to a late realisation of the new game rules (Company B, Business Development Director, January 2006). Although that inertia still remains, “there is evidence that it reduces every day and there is no doubt that customers will become more promiscuous in the future unless building societies find the way to maintain them” (Company D, Marketing Director, November 2006).

Using the words of the Press Manager of the Building Societies Association, “the positive side of the convulsive time lived in the financial industry has been that building societies have to some extent come back to their origins. They have realised what they are good at and promoting that will be their success strategy”. It can be found in the statutory documents of any UK building society that the highest priority

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<sup>100</sup> The FSA is a unique regulatory organisation for the financial industry in the UK and it is one of the few existing around the world. Since its creation in June, 1985, its main objectives are ensuring confidence in the market, promoting public awareness about the industry, reducing financial crime and finally fighting for consumer protection ([www.fsa.gov.uk](http://www.fsa.gov.uk)). From these goals, it is relevant that the explicit relevance is given to customers.

of the firm is satisfying their members, and therefore any decision should be made towards it. As a result, building societies have perceived that their advantage comes from their customers. The question is how to make the best of that advantage.

Building societies have started to investigate their customers by using marketing research and timid segmentation strategies. They also have the objective of having a more fluid contact with customers by increasing interaction by organising special and informal events where customers can approach managers and use the opportunity to ask questions or just learn a little bit more about their financial institution (Business Development Director, Company B, September 2006). Building societies have perceived that although their financial customers are more used to the financial terminology and they count on a wider range of information sources, the vast majority of offers and information available are somehow frightening (Executive Director, Company B, September 2006). Therefore, customers need not only a financial provider, from a financial organisation that they can trust, that will advise them on the right products or direction that they should take (PR Manager, Association of Building Societies, December 2006). This means that the relationship between a building society and its members is based on trust, a trust that sometimes has been built a few generations before, and which, unlike a product, it is very difficult to copy.

In addition to this attempt to know their customers, they are also trying to let their customers know them. With this objective, building societies have reinforced their sponsoring of regional activities and have become more involved in the development of the communities where they operate. All these courses of action have several implications. First, they generate high recognition between local customers at a more adjusted cost, than mass media advertising campaigns. Second, due to the local scope of the smallest building societies, such a sense of commitment with the community makes sense and reinforces the mutual concept (Marketing Manager, Company D, November 2006).

It can be concluded that the strategy for Building Societies is a kind of combination of a niche marketing strategy but surrounded by the idea of strengthening the relationship between the building society and their members characterised by trust, mutual satisfaction, long term vision and mutual collaboration.

From all of the above, it seems that it can be accepted that relationship marketing has a solid basis to grown on within building societies. The question now refers to the best strategy to consolidate those relationships between organisations and customers. The interviews identified a concern about: how to keep customers attached to the organisation with products of a large maturity horizon, such as mortgages. The solutions suggested by the different organisations pointed towards being “proactive in the provision of suitable products that satisfy the evolving customer’s needs” (Company B, Executive Director). The managers of Company B and Company C coincided on the argument that it is usually the firm where customers have their accounts, the institutions that finally end up also getting the purchase of the mortgage and other future financial needs. It has been observed that once customers have engaged in the acquisition of a mortgage or investment product, the repurchase figures increase (Business Development Director, Company B, September 2006).

Another major concern of building societies that been the need to design products that cover the whole spectrum of customers’ financial needs. They realised that the previous situation has favoured certain complacency in their strategies. Actually, they have recognised that over the last few years their level of product innovation has been quite low, and how it finally affected customers and their repurchase rates. In this context, companies consider that future cross-selling and up-selling strategies cannot be driven by the idea of increasing profits only. In this line, “profitability is a minor question for building societies. It is not that it is not relevant. The objective is generating profits such as the society can survive. The emphasis has to be put more into business efficiency and customer satisfaction”. (Company C, Marketing Director).

In the design of cross-selling and up-selling actions, building societies have to be aware of several factors. First, although they are trying to sort this out at the moment, they are still behind other financial institutions in terms of market research. In most cases, building societies do not really understand who their customers are, how they make the purchase decision and, finally, what they need now and in the future (Marketing Manager, Company D, October 2006).

Secondly, the introduction of new products or services has to be done by targeting customers carefully. These innovative products/offers should respond to an almost tailored strategy where products are designed only for specific groups of customers with well defined conditions and according to the organisational capability to serve the demand (PR Manager, Building Societies Association, November 2006).

#### **8.4 Retention strategies via Cross-selling and Up-selling for Company B**

As it has been concluded in the previous chapter, several segments were found in Company B's database, different enough to justify developing specific retention and cross-selling strategies. From the clustering analysis the final decision of all four clusters was selected: First Nest, Young Savers, Heavy Investors and Future Planners. The variables with a stronger discriminatory power in the definition of those four groups are-in descending order - customer age, the first product acquired and the length of the relationship. In the following sections, specific retention strategies using cross-selling and up-selling opportunities will be fully explained for each segment.

##### 8.4.1 First Nest

First Nest is the second largest cluster identified in Company B's database. These clients acquired their first product from Company B when they were in their late 30's. They have been with the company for over ten years, which places them in their early 40's. As their name suggests, the main product acquired by First Nest is the mortgage, with an expected average life of 20 years. In addition to this product, they tend to acquire some investment/savings associated with the same account. The relevance of retaining this customer base on the high average balance of their

accounts and the average acquired products acquired. In addition to this, the size of this large group of first buyers for the organisation justifies a unique retention strategy. If it is taken into account, the way in which the UK property market works with its figure on the “property ladder”, the interest for First Nest increases, together with the probability of a second mortgage in the future.

The channel analysis shows a clear link between First Nest and Company B as the consumption of this cluster is effectuated through the company’s own network of branches. This special feature can be observed in the evolution of the product consumption effectuated by First Nest. As expected, Mortgages remain as the most acquired product with a growing presence in the market and also significant up-selling opportunities which, on this occasion, will cover the re-mortgaging needs of customers. The rest of the products acquired by this cluster mainly move into Investment products.

The analysis of the interconnections between products shows that First Nest does not offer too many cross-selling opportunities. The only strong interaction between products comes from Scot.Bond Extra, towards the acquisition of Scotline. However, this is not a two way relationship, as the reverse probability is insignificant. Under the up-selling opportunities, it seems that First Nest are quite capable of repeating the purchase of previously acquired products such as Mortgages, Scot.Bond Extra and Scotline. These opportunities seem to remain fairly constant during the whole consumption life of First Nest.

The repurchase analysis shows that First Nest’s repurchase remains fairly constant during the first two repurchases, to increase on the third one. It is on the fourth purchase when a higher affluence of repurchases occurs. This coincides with the point of time where when the mortgage is almost paid off, allowing customers to start thinking about other financial needs. Continuing with the repurchase decision, it seems that the most important factors in realising that decision are the length of the relationship with the organisation, the longer First Nest members stay with Company B, the more likely, to increase the number of products acquired from it. Additionally,

the first product acquired has also an influence on that probability being Savings and Investment products, those with a stronger impact.

When the objective of estimating the temporal scope of the repurchase decision of First Nest, it has been proven that this cluster takes the longest time to make their second acquisition. Actually, three quarters of the purchases only happen within nine years from the moment of the first product was purchased from Company B

In conclusion, the segment of First Nest customers shows potential to become a very profitable segment to retain. Figures like the value of the balance, the selection of the direct channel and the average ratio of acquired products are very positive. Additionally, the pattern associated with the property ladder suggests clear opportunities for the firm. In terms of the cross-selling and up-selling strategies, it has been proved that cross-selling might not be a sound strategy immediately after the acquisition of the mortgage. On the other hand, up-selling seems to be more sensible. In this way, Company B should investigate the ways of up-grading the conditions of their current mortgage and start promoting it after two or three years since its acquisition. In addition to this, the company could also try to take advantage of the apparent preference of these customers for investment products in subsequent purchases. In this way, contacting First Nest with information about investment alternatives and the advantages of linking them to their mortgage could work as an incentive to promote repurchase.

#### 8.4.2 Young Savers

This segment represents the smallest group of customers from Company B's database. It is formed by young clients, under 18, the legal age to acquire more complex financial products. As it could be expected, their average balance is low as well as their consumption rated, which is the lowest of the four clusters. Although all these figures may not represent proper justification for the efforts necessary to retain those clusters, maintaining them within Company B can be the most important strategic decision for the company. From their current value perspective, Young Savers do not deserve any special attention. However, after paying attention to their



potential profitability, the situation drastically changes. Actually, it is not until customers reach the age of 18, when they start being attractive from a financial point of view. Adult customers represent a target for students' accounts, loans, credit card accounts, graduate accounts amongst other financial products. It seems clear that today's young customers will be tomorrow's first buyers looking for mortgages or investment products. Therefore, an early attraction and a well managed retention strategy could increase the chances of those customers negotiating a mortgage with Company B rather than other financial institutions. If building societies, in general, and Company B, in particular, are blind to the potential of these young customers, they may be losing their chance of having active options during the moments of high acquisition of financial products.

There is another consideration regarding this cluster of Young Savers, which is that customers making the purchase decision are not exactly those who own the product. Usually, it is parents or other relatives, who decide to put aside some money for future needs. However, those decision makers will not be approaching Company B requiring a first mortgage in the future. This means that the strategy for this cluster should be double: an attracting strategy targeting parents and relatives and a retention strategy targeting the beneficiaries of the accounts. The consumption evolution of Young Savers shows a clear predilection for saving products until they are approximately 18 year old, but still not the decision makers and the account holders. After this point, a second product category takes off when customers approaching their late 20's relate to mortgages. It is with this second category that the account holder and decision maker roles reconcile. More specifically, this product category evolution can be observed by the particularities of the products consumed. The predominant product across the first two purchases is Scotline. From a cross-selling perspective, there are not many opportunities between the first and second purchase as there are products like Shares and Mortgage that, at that point, are dead routes. However, after the second purchase, Mortgage and SB2KX become the principal receptors of the interest of Young Savers. The question here is whether they could still be considered as Young Savers or if it should be more appropriated to consider them "transitioners" to other clusters. Additionally, there are several products

offering interesting up-selling chances. Mostly these opportunities come from investment product, which will increase over time. Finally, mortgage up-selling also is relatively high until a third purchase is made.

As could be expected from the issues mentioned previously, the repurchase figures are significantly low after the second purchase. After that, the situation is recuperated following the same pattern of repurchase data for First Nest customers. Such recuperation is so drastic that it doubles the repurchase figures. This decision seems to be influenced by two variables: the type of product acquired first and the length of the relationship with the company. Regarding the former, short life products such as savings and investment have a deeper impact on the repurchase decision. According to the positive sign of the relationship, as customers remain longer with Company B their repurchase probability increases.

Finally, the effect of time has been measured evidencing another relatively long inter-purchase period of time. While 50% of Young Savers, who acquire a second purchase, do so within four years, an extra 25% take another two and a half years. This means that 75% of repurchases happen within almost eight years from the first product acquisition. Again, those long periods of time do not contribute positively to encourage repurchase. However, this situation is more worrying than the First Nest's case because Young Savers consumption starts with savings policies, usually with low balances according to the saving possibilities of the decision makers.

In conclusion, Young Savers can be considered as the most unpopular segment of Company B. It is not only about its small size, low balance and small product acquisition, but it is about not using the direct channel, showing worrying repurchase figures after the first acquisition and the bi-polarity between decision maker and account holder. As if this was not enough, there are "limited" cross-selling and up-selling opportunities, and when those translate into repurchase figures, the inter-purchase time is quite long. So, why bother with the retention of Young Savers? As a punctual perspective, there are no arguments to use in favour of retaining this segment. However, under the customer life cycle and its evolution, this segment will

bring numerous consumption opportunities in the future. Therefore, if Company B is able to build a strong relationship not only with the decision makers, but also the account holders during these low profitability years, the firm will be in a better position to take advantage of future benefits. As mentioned before, the retention strategy is twofold. In order to satisfy the decision makers this activity should be done fairly quickly, developing new products continuously with low cost/price to be concordant with the financial possibilities of the family. On the other hand the retention of the account holder can be materialised with two strategies. First, a periodical contact is required in order to help the account holder to identify the provider: Company B. Additionally, cross-selling strategies should come from either, launching products into the market targeting 18 year old consumers; continuing to encourage savings with special rates for existing customers and/or by offering special conditions for mortgage purchase just for having been a loyal customer. This is a strategy aimed at remunerating the loyalty of customers who might not be aware of such a relationship.

#### 8.4.3 Heavy Investors

This third cluster represents the largest segment of clusters found on Company B's database. Despite being in the company the longest, their product acquisition ratio and average balance are quite low. They can be found in the big cities of Scotland, occupied under the 'blue collar' category. The interest of Heavy Investors comes from their large size and special consumption characteristics, which are unlike the consumption patterns of the other clusters.

In opposition to Young Savers, their preferred purchase channel is the direct net of branches of Company B. This can be taken as a positive feature, as it suggest at least an existing face-to-face contact. The consumption analysis, which evidenced a unique acquired product category: investment. The fact that this category is the most acquired across the different purchases analysed is quite surprising due to the age range of Heavy Investors. As it has been pointed out before, those customers, who are currently 35, started their relationship with Company B when they were in their mid 20's. Due to their socio-demographic profile, it was expected from them being

highly attached to the mortgage acquisition. However, this is not the case and the mortgage category is not significant. As a consequence of this situation, there are two possible considerations which can be taken. Firstly, Heavy Investors do not perceive Company B as a mortgage service provider that will satisfy their needs. Actually, for them, Company B works as an investment products provider. Secondly, this segment is “loyal” to their existing mortgage provider, or they do not want to go through the hassle of switching providers. Therefore, the right moment to get a slice of the mortgage market is by approaching potential first buyers.

The most acquired product during the five purchases analysed is Scotline, followed by SB2KX. Actually, this product shows a clear evolution from a timid beginning until being “head to head” on the lead of the fifth purchase. In terms of cross-selling, it seems clear that those opportunities will come from investment products across the whole cycle, accompanied saving products like ISAs at the end of the consumption analysis. On the other hand, up-selling offers a different picture. The most attractive product in this perspective is SB2KX whose up-grading figures are very significant. Although Scotline does not offer any great up-selling deals over the first purchase, it experiments a clear recuperation as consumption evolves.

The repurchase pattern of Heavy Investors is also quite interesting. It is at the second purchase where the repurchase figure reaches its lowest value. However, after this challenging situation, repurchase values recuperate and, in the end, almost 70% of the existing, active customers acquire an extra purchase. Together with the expected positive influence of the length of the relationship, the type of first product is also significant. Here, while investment products have a positive effect on the repurchase likelihood, the opposite happens if the first product acquired has been a mortgage. Finally, the new parameter that appears with a negative impact is the average life of the product. This can be translated into the following argument. As the life of a product held increases (for example a mortgage), the probability of Heavy Investors to acquire a second product reduces and vice versa. Therefore, short life products have a special interest for this group of customers, clearly orientated towards making the most of their investment possibilities.

From previous analysis it could be deduced that time has a significant impact on Heavy Investors. Actually, contrary to the long inter-purchases lapses showed by the previous clusters, this segment presents a faster pattern according to the type of products that its members acquire. For example, 50% of the repurchases by Heavy Investors have occurred within one and a half years from the purchase of their first product and 75%, within an extra year. Those values show the need for short maturity products in this cluster.

In conclusion, Heavy Investors present significantly odd behaviour from the rest of the clusters. It basically responds to their focus on investment products, over the mortgage, a natural product for their age range. However, it does not look like Heavy Investors want anything else than investment products from Company B. The retention strategies for Heavy Investors should obviously be focused on offering fast and simple investment products with a relatively short life. The idea goes on about developing new products which satisfy those needs and also making available benefits for up-grading. This approach has to be activated within months of the first investment product being acquired in order to increase the chances of Company B having acquired its products again. Finally, the size and potential in Heavy Investors deserve some effort of trying to make Heavy Investors aware of the fact that Company B is also a mortgage provider.

#### 8.4.4 Future Planners

The last cluster identified on Company B's database represents the most mature customers of the organisation. Although size-wise it might not look attractive, its high consumption ratio, together with the average balance, justifies the desire for retaining Future Planners. Due to their age, it is expected that savings and investment products represent a high proportion of the consumption aimed at preparing for retirement. Additionally, because of the occupation within managerial roles, it could be presumed that Future Planners' portfolio will be a quite sophisticated. Another point in favour of this segment is the selection of the direct channel over agents to acquire their products.

In terms of Future Planners' consumption, looking at the overall picture, investment products category is the most acquired. However, when breaking down that consumption into specific products, the result is that the consumption is less concentrated on a unique product, as happened in other segments. Although Scotline remains the most acquired product across the five purchases analysed, it was closely followed by Mortgages at the second purchase. This category, despite the fact that it reduces its relevance as the number of purchases increase, still is significant in the portfolio composition. The product that substitutes the mortgage option is SB2KX, which after the third purchase becomes the second most acquired product. Finally, the consumption basket is completed with the inclusion of Shares, No Trace Bonds and Cash ISA. In the case of Cash ISA, its consumption increases, becoming a strong alternative for the fifth purchase.

From a cross-selling point of view, the opportunities came from linking products like Scotline and SB2KX, the latter being more of a receptor than a generator of cross-selling. Another significant relation comes from Mortgages moving towards Scotline, although, again, this is unidirectional rather than bidirectional. The last cross-selling opportunity worth to mentioning comes from Shares into Scotline, but, again, it does not work vice versa. In relation to the up-selling perspective, the most significant upgrading or self-repurchased products are SB2KX, followed by Mortgage and Scotline. More specifically, SB2KX's up-selling figures remain significantly high during the first three repurchases in order to reduce on the last one. From this analysis, the situation of SB2KX results very interesting as it is a complete product that receives significant cross-selling, but also its holders seem to remain loyal to the acquisition.

The repurchase figures represent a situation where the most challenging moment repurchase wise, is between the first and the second acquisition. In terms of the consumption, it is when Mortgages are still a sound alternative for the repurchase decision. Across the analysis of Future Planners and the rest of the clusters, it has been observed how the acquisition of a mortgage is usually associated to low repurchase levels.

Following the repurchase decision, Future Planners seem much more complex in terms of the factors affecting that decision. For example, the length of the relationship has a negative impact on repurchase. This means that the longer customers remained with the organisation, the less likely they are to buy a second product. It has to be said, that this pattern was also observed for the cluster of mature customers from Company A. As customers approach their retirement, their consumption reduces. Also, the starting age of customers when buying their first product, has a negative impact. Although it cannot be inferred that when customers reach retirement age their consumption is immediately cut off, it has been observed that there is a significant decrease in their acquisition patterns.

The other two factors affecting the repurchase decision are: the product acquired first, being Investment and Savings categories which have the biggest impact; and the life of the first policy, with a negative effect. This could suggest the need for offering fast products, with a short life, to encourage repurchase.

Returning to the idea of time, Future Planners present a faster repurchase sequence than clusters one and two. In this way, 50% of Future Planners acquiring a second purchase, do so within two years from the first acquisition, and 75% repurchase within four years from that first contact. Although Future Planners are faster than Young Savers or First Nest, they run behind Heavy Investors, in terms of their inter-purchase periods of time.

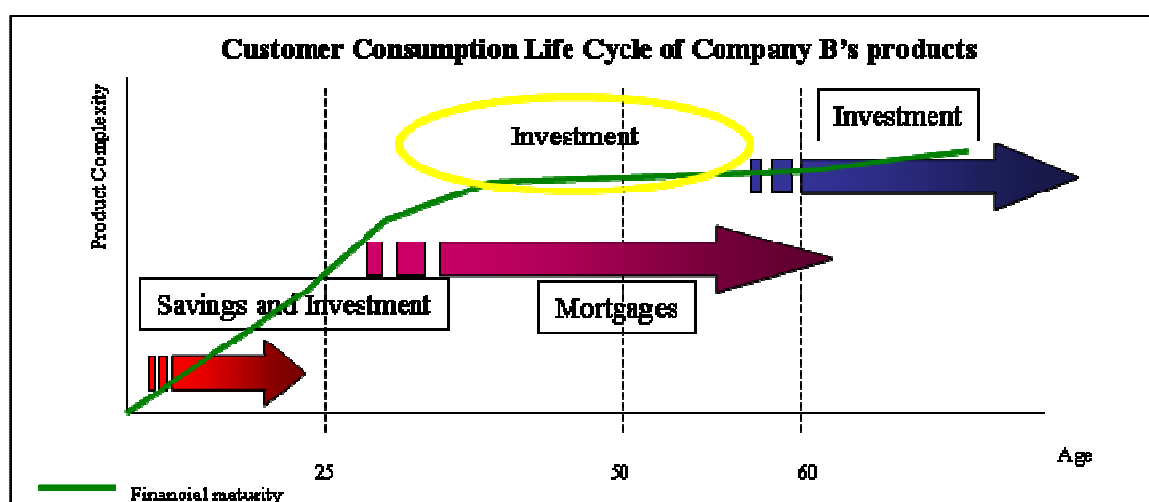
In conclusion, Future Planners are a very interesting segment from a retention point of view. First their balances are high and repurchase figures are also significant. Moreover, their consumption patterns offer various up-selling and cross-selling opportunities. In order to make the best out of them, there are two possible courses of action. First, the promotion of investment products should be done linking Scotline, Shares and SB2KX, or developing new investment alternatives with short maturity periods. This emphasis on time issues is quite relevant due to the “limited” period of time when customers can be actively involved in acquiring more financial products from Company B. Finally, it has been realised that there is room for a mortgage

promoting strategy in this segment. As a result, retention strategies should move towards the cross-sale of investment products aimed at preparing for retirement or making use of extra income.

### 8.5 Product Consumption Life Cycle for Company B

As for Company A, the objective of this section is to provide a clear image of how consumption evolves across customer life cycle. In order to do that, the main results obtained from the individual analysis of the four clusters have been put together. Figure 8.3 summarises this in a graphical way<sup>101</sup>.

Figure 8.3 Company B Product Consumption Life Cycle



From Figure 8.3, it can be deduced that while customers are still young their financial maturity is at the bottom of the spectrum and their consumption principally focuses on saving and investment products of low value. There is just a mention to make here referring to the fact that, at this stage of the consumption life cycle of customers, there are two roles co-habiting. First, there is a decision maker who selects the provider and products, thinking of the future needs of his/her children.

<sup>101</sup> The X-axis is a rough approximation of customer ages. The Y-axis represents the complexity of the product acquired, information provided during the conversations with Company B. The size of the arrows displays the length of time each product has been consumed. Finally, the vertical discontinuous lines mark the borders between clusters. Although four clusters have been identified, there are only three lines because Heavy Investors and First Nest overlap each other.



Second, there is an account holder (the child) who will receive the benefits of the products acquired by the decision maker. However, this account holder does not have a direct impact on the decision or contact with the provider.

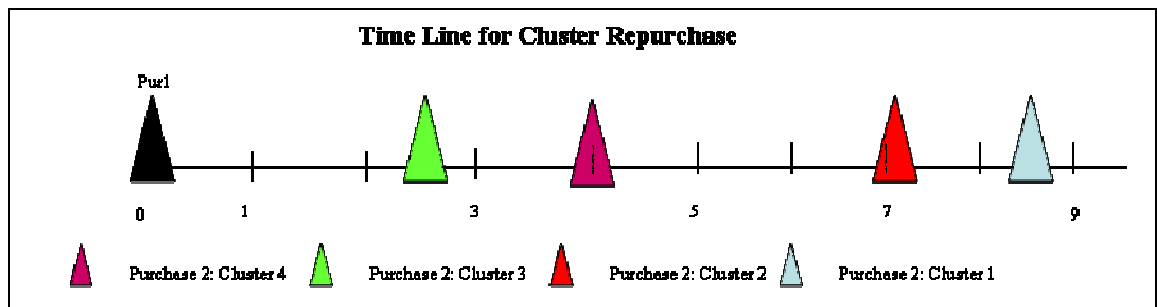
Once customers have passed that age, there is a gap in time (18-25 year old), where customers are quite inactive in terms of consumption. The reason for that is that Company B, currently, does not offer the kind of products targeting those needs. Finally, when customers are in their late 20's, the relationship is re-established again, by the acquisition of their property and the associated need for a mortgage. During the next two decades, this product category leads consumption, accompanying customers on their "property ladder" process. Due to the features of this mortgage and the implications of their acquisition, it can be observed how the financial maturity of Company B's customers increases with this new product category. The final natural stage starts when customers start approaching their retirement age. It is here that consumption of investment products takes the lead, playing a paramount role. The high value of those investment products, the demand for fast policies with short maturity periods and the reduction of the inter-purchase lapse of time suggest a more sophisticated financial products acquisition.

Furthermore, there is an ellipse located in customers aged 30-50 representing the acquisition of investment products. This corresponds with the condition of Heavy Investors. As it has been already mentioned, this cluster presents a kind of odd behaviour as it does not exactly match with a natural evolution of the financial needs present in the customer life. As their name indicates, their consumption is basically focused on relatively high value investment products, with serious interconnections between the range of products offered by Company B, to this category. This unusual behaviour should be the object of further understanding as it is a key issue for a traditional mortgage provider such as Company B, as a building society.

Finally, it is not only about the socio-demographic differences observed in the cluster definition, but also about how these features have an impact on specific consumption patterns identified for those clusters. Within the special consumption patterns, time

has a significant effect on determining the inter-purchase periods of time. Therefore, they should be considered in order to use cross-selling and up-selling as the engines to promote retention. All these considerations have been taken into account for the creation of Figure 8.4 which displays the lapse (in years), between purchase one and purchase two, for each cluster, when 75% of “repurchasers” have effectively made the repurchase decision.

Figure 8.4: Company B Inter-purchase timing per cluster with 75% of the purchases done (purchase 1 and 2).



From the Figure 8.4, the first consideration to make is that Cluster 1 (Young Savers) is the slowest to make the repurchase decision. This can be the result of the bipolarity of roles between the decision maker and account holder, and how this last one cannot access to a wide range of financial products until he/she reaches the legal age. Following Young Savers with almost nine years, Cluster 2 (Fist Nest) appears with around seven years between purchases. A plausible explanation for this length of time corresponds to the mortgage acquisition and how it compromises satisfaction of financial needs for some time. In opposition to Clusters 1 and 2, Cluster 3 (Heavy Investors) is the fastest moving segment, taking just over two years to make their repurchase decision. It has to be pointed out how the emphasis on short maturity products might be affected by a short lapse of inter-purchase time. Finally, similarly to Heavy Investors, Future Planners are found to have an average period of a four years lapse of time from the first product acquired from Company B. Although, again, this cluster presents a preference for investment products and short life policies, the presence in the portfolio of mortgages seems to delay the repurchase decision of Future Planners slightly.

## **8.6 Company A and Company B segmentation results overview**

Despite the fact that Company A and Company B operate in different markets and offer different product categories, the comparison between the results of both companies can suggest similarities and differences on the consumption patterns, that perhaps could be attributed to cultural differences between Spain and the UK. Although the purpose of this research has not been ever establishing similarities or differences between the segmentation and consumption results from both companies, this comparison exercise could uncover potential areas of further research

In terms of the similarities, both segmentation exercises have highlighted the importance of Age as key discriminant factor. As a consequence, some of the segments have a counterpart in each company (Family Projects and First Nest; Mature Milk Cows and Future Planners). Also, the regional aspect is a constant in both companies being the Basque Country the focus of attention for Company A and Scotland, for Company both. Both areas have very strong identities, sometimes linked to independency ideas, which might make customers more inclined to buy products from “national” providers. This is also supported by the clear preference that customers showed for direct channel (included the financial institution owning Company A) above intermediaries. Also, factors like the length of the relationship with the company and the first product acquired have been strong discriminant variables when accomplishing the segmentation approach. However, occupation/professional activity also appears as a discriminant factor in Company A. Usually, the occupation is only a concept associated to several characteristics such as certain income level, life style, social status, etc. This suggests that Company A segmentation responded better to socio-demographic variables than Company B.

In terms of the segments and their consumption, Company A’s customers are quite active between their mid 30’s and mid 50’s (two car policies, two home insurance policies, accidents, risk and the beginning of saving products). On the other hand, Company B’s customers are quite dormant during those years, maybe because of the acquisition and repayment of their mortgages, but then, after their mid 50’s consumption kicks off with several saving and investment plans which are consumed

quite rapidly. This shows that the Company B has developed attractive products for mature age customers, while company A, despite offering retirements and saving plans too, seems to have quite dormant mature customers. Linked to the consumption of saving products, it seems that while the consumption life cycle in Company B starts with them, Company A's customers do not start consuming saving products till their mid 50's. This might suggest that saving behaviour is not a feature of the Spanish customer as it is in the UK one, given the protection of the public pension system. On the other extreme of the spectrum, the young segment for Company A starts with over 18 year old customers, while for Company B, they start attracting customers at young as 8. It has been explained that usually these are parents and relatives who open those saving products for their children, however, this can be a way of starting to make children aware of finance activities and how to deal with them. This early start of UK customers consuming financial products, the parallel behaviour to the Spanish customer during their middle age, and the active saving and investment consumption of British customers might suggest a more sophisticated financial consumption in the UK than in Spain.

### **8.7 Overall Results: high level evaluation**

From a strategic perspective, the results and findings obtained over the previous four chapters have progressed research on customer retention and cross-selling in several ways. Firstly, this project has demonstrated that financial services providers deeply buy into the concept of customer retention and how, in order to achieve this goal, they consider cross-selling a powerful vehicle. Despite this positive appraisal, it seems quite contradictory that companies are not actually actively implementing customer retention programs and cross-selling activities within their strategic plans. From an operational perspective, despite recognising that customers differ in their consumption needs and servicing requirements, the segmentation approaches followed in financial services providers, if any, are quite rudimentary. This suggests that the concepts of customer retention and relationship marketing still have a long way to go before being fully implemented. Discussions with the participants in the project reveal several barriers (e.g. culture, skills, cost). An understanding of those

barriers and their importance could focus research to help companies in the implementation of the concepts.

Secondly, the “Who-What-When” framework has been successfully demonstrated in two companies. This framework could be used to help financial services providers who are already thinking of approaching customer retention through cross-selling. Through the application of the “Who-What-When” methodology, the relevance of customer segmentation in the financial services industry has been highlighted, supporting the argument that “one size fits all” is not appropriate in the context of customer retention and the design of cross-selling strategies. In relation to segmentation, this thesis has also demonstrated the relevance of the Life Cycle Theories and the need to understand customer value when considering cross-selling and customer retention. From a consumption perspective, the research has brought the idea of a new concept: the “strategic products”. Based on the product interconnections analysis, it is clear that companies have products that act as an anchor for cross-selling and up-selling opportunities, using this as a platform from which to offer other products with less potential. Understanding these differences are crucial when targeting offers and developing new products.

Finally, with regard to the repurchase decision, several key results have been found. The relevance of the direct channel to encourage further consumption is highlighted. To confirm this, further research could assess the suitability of companies “pushing” customers into self-servicing channels. Also, the analysis has demonstrated the strong linkage between customer retention and repurchase, due to the consistent impact of the length of the relationship when predicting any repurchase. The last contribution from the analysis, focuses on the dynamic component of cross-selling, which suggests the need to take into account “time” when addressing customer retention and cross-selling. In practice and depending on customer characteristics and the product features, the repurchase horizon varies, leading to faster or slower repurchase behaviour.

## **Conclusion**

In conclusion, this chapter has tried to summarise the results obtained from the data analysis effectuated over the previous analytical chapters. The first objective has been about summarising the results obtained when addressing research questions one and two, about the relevance of Relationship Marketing in the respective industries of Company A and Company B, and about the role that Cross-selling and Up-selling have on that relational framework. Once both hypotheses have been satisfactorily tested, the next step has been the design of specific retention strategies using cross-selling and up-selling for each company. Here, the third research question comes into play with research question three, suggesting that the existing significant differences within organisational customers (of socio-demographics, consumption patterns and acquisition time sequence) recommend several cross-selling strategies to achieve retention. The analysis carried out has proved that customer differences exist and those have determined specific cross-selling strategies. Finally, for each company, the “Who-What-When” framework has been applied to develop four particular retention plans, one for each cluster, using repurchase strategies to encourage customer retention. In addition to those tailored strategies, the last two outputs produce for each company have provided a “high level view” of the evolution of consumption life cycle and also a time-line to understand when customers are more likely to acquire more products.

The following and final chapter compiles the main contribution of this research by providing an overview of the project (methodology, motivation, research questions, data collection, evidence and results). It will also discuss the limitations of this study in terms of the data and the approach selected. These limitations will offer opportunities for further research which will also be detailed there.

**Chapter nine:**  
**Discussion of results, Contributions,**  
**Limitations and Further Research**

## **Introduction**

This thesis has focused on two case studies which have evidenced the value of cross-selling and customer retention in the financial services industries of two countries. Despite the recognition of the importance of cross-selling and retention, methods for the identification of cross-selling opportunities remain limited among many financial institutions. Hence, the thesis developed and tested a specific analytical framework to identify tailored cross-selling and up-selling opportunities. The thesis has demonstrated that this framework, when implemented under real marketing conditions, confirms not only the validity of the proposed framework itself, but also the importance of cross-selling and customer retention concepts in the financial industry.

The purpose of this final chapter covers three main areas. First, it provides an overview of the entire research process: beginning with the motivations to conduct this research and ending with a brief summary of the results, it outlines the decisions made during the project which have led to the research contributions in the cross-selling and customer retention fields. Second, the contributions are outlined and discussed in the context of the research area and existing research, demonstrating the rigour of the study. Finally, the thesis discusses the limitations associated with this research, and how they may be minimised by carrying out further research, expanding into other industries or with more data or different approaches.

### **9.1 Motivations**

Several factors motivated the decision to undertake this research:

1. Relationship Marketing and customer retention have both received enormous attention from the academic community and from a conceptual point of view: their definitions, benefits and possible issues (O'Maley and Tynan, 2000; Ryals and Knox, 2001). Despite being claimed to be successful practices, the efforts of practitioners to put Relationship Marketing and customer retention programs into practice have not been so successful. So far, previous research has strongly focused on establishing the conceptual framework about what relationship, retention and loyalty are (Sin *et al.*, 2005). Other lines of investigation have centred on questioning different

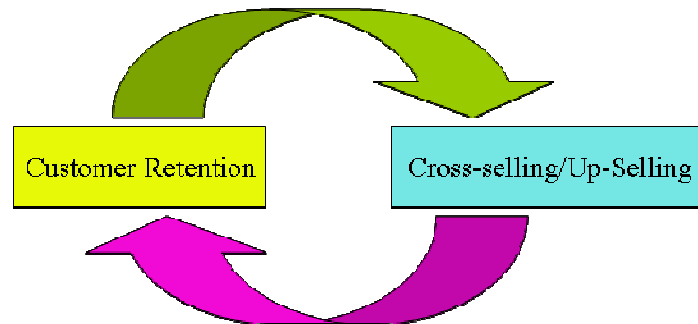


organisations about their opinions on the validity of such concepts in their industries (Jacobs *et al.*, 2001). Besides the rigour of those attempts, the final situation is that there is still a lot of misunderstanding on how to implement Relationship Marketing concepts in real market conditions (Ahmad and Buttle, 2001; Buttle, 2004).

2. From all the possible components of Relationship Marketing, such as loyalty, the development of new products, direct marketing activities and customer life time value, amongst others, cross-selling and up-selling have received limited attention from the research perspective (Kamakura *et al.*, 2003; Kamakura *et al.*, 2004; Salazar *et al.*, 2007). More specifically, most of the research has been primarily conceptual, trying to define and assess what cross-selling is all about and its main benefits (Jarrar and Neely, 2002). However, the perspective of how to identify and design cross-selling strategies in the customer retention framework has largely been ignored (Li *et al.*, 2005).

3. There is an interesting relationship between customer retention and cross-selling the nature of which is still under debate (Li *et al.*, 2005; Kamakura *et al.*, 2004). One view holds that by companies cross-selling their products, customer retention ratios increase. In other words, cross-selling is the cause and customer retention is the consequence (Peelen, 2005; Peelen and Kowlczyk, 1999). Another view maintains cross-selling is the result of customers having an existing relationship with the organisation (Jarrar and Neely, 2002; Li *et al.*, 2005). Therefore, using this argument, customer retention would be the cause and cross-selling the consequence. Although this research did not set out to clarify this dilemma, its mere existence increased interest in the field. Without trying to offer arguments supporting one view or the other, the approach taken in this research when treating cross-selling and retention, assumes that there is a strong association or relationship between them, but defining the direction of the causality falls outside the scope of this research. This approach could be defined as a virtuous cycle where buying more products from the same provider reinforces customer retention and due to this underlying relationship, customers are more likely to acquire more products from the provider. This concept is summarised by Figure 9.1.

Figure 9.1: Virtuous Cycle of Customer Retention and Cross-selling



4. The findings obtained from a previous research project conducted in 2004, played a very important role in shaping this research project. The results obtained and implications for industry players were crucial to narrow down the scope of this project, identify gaps which needed to be addressed and to increase the appetite to help companies discover customer retention strategies via cross-selling initiatives.

### **9.2 Research objectives:**

Although Relationship Marketing is not suitable for every industry, it has been recognised to have a special impact on the Services Industry given the nature of the products dealt with (Lemon et al., 2002; Durkin and Howcroft, 2003). In addition to this, the financial services industry was selected because companies have both the quantity and quality of data that was required for the quantitative approach of the project. In addition to this, the financial services industry presented an interesting situation across Europe and other Western countries after the liberalisation and deregulatory processes. As a result, the status quo of financial services providers was shaken and serious, re-structured processes of the market happened. Such winds of change introduced more competition and, therefore, pressure in getting and keeping loyal customers. Therefore, concepts like customer retention and Relationship Marketing have become key elements to introduce the strategies of the financial firms. The thesis had the following objectives:

Objective 1: To investigate the value of customer retention in the financial services industry

Within this context of the financial services industry, the first objective was to establish whether the concept of customer retention is relevant due to the characteristics of the industry (Durkin and Howcroft, 2003; Gustaffson *et al*, 2005). The reason for trying to investigate this first, was to assess the suitability of attempting to design cross-selling or up-selling strategies linked to retention goals.

Objective 2: To investigate the value of cross-selling in the financial services industry

The second objective, assuming that there is convincing evidence for accepting the necessity for customer retention in the financial services industry, aimed to investigate whether cross-selling and up-selling are strategies where value can be achieved. The virtuous cycle explained before, determined the selection of cross-selling and up-selling as the elements sustaining the retention strategies suggested. Again, in the event that financial companies did not find any benefit in linking their retention strategies to cross-selling and up-selling, the subsequent part of the research would have been unnecessary and other courses of action, related to customer retention, should have been investigated.

Objective 3: To develop and test a framework for the design of effective cross-selling strategies

The final objective focuses on suggesting an analytical framework that, with some considerations, could be implemented across different industries in order to design particular cross-selling and up-selling strategies. The question which arose at this stage was, whether a generic cross-selling and up-selling approach would accommodate comfortably enough of the customers of a single financial provider. From the literature, there were some concepts offering evidence against a generic cross-selling strategy. For example, all the research conducted on segmentation was focused on the objective of classifying customers based on several criteria (i.e. socio-economic, demographic and behavioural) (Sinha and Uniyal, 2005; Dibb, 2001). Another example is the consumer life cycle theory, suggesting that customer

consumption needs to evolve as they move towards different stages in their life cycle. This basis favours a tailored approach and seems quite likely that it would also be the case for cross-selling, however, it needed to be tested in order to identify enough evidence to show differences between customer segments, purchase patterns and the buying sequence. The design of tailored cross-selling and up-selling strategies is very complex and requires highly detailed information on customers and their consumption. Therefore, before designing those strategies, the first objective was conceptualising an analytical framework that would provide meaningful information about the directions that different customers were taking in their consumption. This framework should test, first, whether those differences in customers' characteristics and consumption were relevant enough to justify a particular analysis. Additionally, the framework should be able to collate the impact of three main elements: who customers are, what they acquire and how they acquire their products, and when they do so.

Due to the nature of these three objectives, the method of enquiry for each one differs. The first two objectives, regarding the suitability and applicability of retention, were addressed using a more qualitative approach through the analysis of interview data, industry and internal information, provided by the participants. By contrast, the design of the cross-selling strategies, based on the suggested analytical framework, was conducted using quantitative techniques. This distinction has had a significant impact on the methodological approach, grounding the research.

### **9.3 Research methodology**

Due to the division of the research questions and the methods used to answer them, the research methodology is characterised by a multiple approach. First, the research is a combination of two epistemological positions. The Scientific Realism view responds to the assumption that scientific theorising is the most reliable way to understand the world (Mäki, 1990) supported by a critical evaluation of knowledge claims which need to be tested to determine if they represent the world and by a clear focus on finding solutions of pragmatic problems in society (Hunt, 1990). Using this perspective, a clear understanding of the conditions of the respondents and their

industry is of paramount relevance when making the case about retention and cross-selling and up-selling in the financial industry. In addition to those, Peter (1992) argues that scientific realism offers the possibility of using several research techniques to approach knowledge and reality. This broad view fits nicely with the combination of research methods, techniques and approaches used throughout this thesis.

With regard to the research strategy, a hybrid approach was followed combining inductive and deductive strategies. According to the research questions, research question one and research question two suggested a qualitative approach which is more suitable in the induction strategy aimed at collecting the views of financial services providers to generalise the value and importance of customer retention and cross-selling in their industry. On the other hand, addressing research question three and addressing research question three made more sense within the quantitative research and therefore with deductive strategies. The introduction of this deductive strategy reflects the need to warrant the validity of the analytical framework (“Who-What-When”), where the results were obtained using analytical tools. In conclusion, while the first two research questions were intended to be addressed using a qualitative methodology (face to face interviews and document analysis), the development of cross-selling and up-selling strategies according to customer and consumption differences, using the “Who-What-When” framework, was conceived to be the result of the application of the quantitative methodology.

Due to the need for rich information about organisations and their customers, the research technique used is the case study. In this research, there are two case studies which relate to each of the two financial services providers who finally agreed to take part in the research. The first company, Company A, is a mutual insurance services provider located in the North of Spain where it has a notable presence, but with a limited expansion compared to the rest of the country. The second organisation, Company B, is a UK building society. It is also a mutual firm with a regional character in their business scope. This combination of the qualitative and quantitative research methodologies responds to the need to ensure more robust

results and makes sense under the research strategies adopted (inductive and deductive). This simply refers to the fact that the use of alternative research methodologies results in much more sound research as the disadvantages of a research methodology are compensated by the strengths of the other.

The methods of data collection have been various. First, there were several (15 for each case study) face to face, semi-structured interviews. Second, the case companies, and other institutions provided various documentation, which helped to contextualise and gather a deeper understanding of the industry. Finally, the design of the analytical framework, aimed at discovering specific cross-selling and up-selling opportunities, was conducted analysing data from each company's respective transactional data base. Both companies were kind enough to provide the researcher with their complete transactional and customers database.

Finally, the analytical framework takes account of four financial services providers. In addition to case companies Company A and Company B, a direct competitor of each organisation was approached (Company C and Company D) in order to gather a more complete understanding of the industries and of the roles that customer retention and cross-selling play there. In addition to this and using the same objective, two national financial bodies were contacted (The Building Societies Association in the UK and ICEA: the institute of cooperative research for insurance and pension companies). Due to the national scope of those two organisations, it obtained a broader explanation of the circumstances affecting the industry. Moreover, their national character showed their independence in opinions and results, which both were provided with. Finally, a reference to Company E (another UK financial provider) is needed because, even though it has not been an active player in this research project, it was used for the pilot study where the pillars of this project were built on.

Regarding the analytical approach of the framework, suggested for the design of tailored cross-selling and up-selling strategies, it has been divided into three stages as summarised in Figure 9.2. The first phase, under the title of segmentation,

corresponds to the attempt to answer the question of who buys products from Company A and Company B, trying to identify homogeneous groups of customers. The tool used for this objective was cluster analysis using SAS Enterprise Miner<sup>®</sup> the results of which were tested in three different data sub-sets: training, validation and testing.

The second phase focused on understanding what each of the clusters or segments identified in the previous stage, acquire. Here, the objective was about displaying the evolution of consumption making particular emphasis on repurchasing measured by the inter-correlations between products. The techniques used here have been various: Markov Chain Process, Purchase Trees, Logistic Regression and Cox Regression.

Finally, the last stage centred on measuring the impact of the inter-purchase time on the repurchase probabilities for each cluster. The impact of time has not been a traditional element of analysis in past studies of repurchase. However, from the results of the study it was deduced that its introduction was a wise decision due to the differences observed between products and clusters. The specific technique used here was the survival curve obtained from the application of Survival Analysis.

Figure 9.2\_ : Analytical Sequence



This analytical framework has been an attempt to obtain a complete view of the purchase behaviour, or as complete as possible, of the customers of Company A and Company B. Although the techniques used at each stage can be changed and replaced by others with more or less limitations, the structure consisting of the “Who, What and When” customers who buy from their financial providers, has proved to be sound in the design of cross-selling and up-selling techniques whose validity should be tested through real business applications.

## **9.3 Key Findings**

### 9.3.1 Company A

The results of the first case study, the analysis of Company A, confirmed the value of retention and cross-selling in the Spanish insurance industry. From the qualitative approach it can be concluded that the industry has gone, and is still going, through a difficult period where competition is increasing, new business models have arisen and customers have become extremely sophisticated. Moreover, insurance consumers have found themselves surrounded by offers from old, new and international providers offering the same product but without significant differences to justify the selection of one over the rest. As a consequence, insurance services providers are trying to find ways of retaining their best customers by engaging them in long-term relationships. Although this sounds relatively easy in theory, it has not been so easy when putting it into practice. Surprisingly, as a result, it has been manifested by those involved in the industry, that the nature of the business (offering protection and quality of life for the future) and the characteristics defining financial services make this industry a natural environment for the development of trust and relationships between firms and customers. In these circumstances customer retention seemed crucial for the future of the Spanish insurance industry.

Regarding the second research objective concerning the value and suitability of cross-selling and up-selling strategies in the Spanish insurance industry, the respondents expressed their views on how relevant it is for them having customers acquiring several products from them. Such benefits do not only translate into higher profits due to the reduction of the attraction cost. With this in mind, cross-selling and up-selling are high valued strategies which insurance companies in Spain are trying to develop and promote at the moment. Additionally, they are facing some organisational barriers to fully develop and take the advantage of cross-selling and up-selling. It seems that old habits die hard and both management and staff are struggling with a radical change of vision in their business, by which product orientation takes a secondary position favouring a rise in customer focus.



From the final part of the investigation of the first case study, the analytical findings have discovered several points to take into account.

#### 9.3.1.1. Validity of the framework:

The “Who-What-When” framework is a comprehensive way of identifying business opportunities in terms of cross-selling and up-selling by picking up on the differences observed between customers, their consumption and their purchase time sequence. To make this proposed framework even more attractive, the validity of the results has been obtained from an internal and external point of view. Regarding the former, the analysis was replicated in three sub-samples of the dataset which were selected randomly. The results were almost perfectly symmetrical suggesting that they are valid across the whole of the transactional customer base from Company A. Moreover, each technique had its own goodness of fit assessment which transmits confidence in the model and to what extent it would be able to predict the repurchase decision. Finally, from the perspective of external validity, the results were scrutinised by the Marketing Director and Market Research Manager of Company A. Due to the application of the scientific method used in this section, during the application of the quantitative method (analysis and results) there was limited contact with Company A to avoid any bias in the analytical process. Although the quantitative approach was conducted independently of conversations with Company A, when the results were presented to them, they not only validated some of the conclusions, but also, they could explain some of the strong results and relationships found between the products.

#### 9.3.1.2. Individualised Cross-selling strategies:

The application of the analytical framework (Who-What-When) on Company A’s database has shown the existence of four clusters of segments that should be approached individually. Each cluster (Risky Youth, Family Projects, Mature Milk Cows and Potential Jack Pots) presents various differences that come from their socio-demographic profiles, their consumption patterns and their acquisition sequences. It has been the combination of those special features that allowed designing tailored retention and cross-selling and up-selling opportunities.

#### 9.3.1.3. Relationships between product consumption:

Another result has been the realisation that there are some “natural” linkages between Company A’s products. These are sometimes bidirectional and at other times they have a well defined origin and destination. This product interaction is one of the areas that required more attention and understanding in order to design effective cross-selling and up-selling courses of action. In addition to this, it has been shown that despite the fact that the repurchase of a product category depends on the purchase effectuated immediately before, this dependency changes at different purchase times.

#### 9.3.1.4. Key factors influencing the repurchase probability:

Following the analysis of repurchase, results showed that there are five key factors affecting the probability of repurchase. Without intending to be exhaustive on how they impact on the probability for each cluster, the factors are:

1. The age of the customer: it suggests that the younger customers are, the more likely they are to acquire another policy;
2. The channel: there is a clear positive significance of the direct channel over the financial institution. Personal contact with the company strengthens the customer-provider relationship;
3. The previous product acquired: here the impact depends on the cluster and its consumption pattern. There are clear driver and follower products identifiable;
4. The length of the relationship: individuals who have been customers of the company for less than nine years are more proactive in the repurchase decision;
5. Customer profitability: suggesting, that the most profitable customers (gold and platinum) have seen their repurchase probabilities increase.

#### 9.3.1.5. Time analysis:

The analysis of the inter-purchase time sequence has suggested the design of a continuous contact strategy where customers are kept informed about the organisation and the products that may be suitable for them. This contact needs to be

in the short term after the acquisition of the first product where the customer's predisposition to acquire an extra policy is higher.

### 9.3.2 Company B

Regarding the second case study, Company B, the results show a similar pattern. The deregulatory process experienced in the late 70's and early 80's, shook the market in general and the position of building societies in particular. If, under regulation competition was limited in terms of the products which different organisations could offer and the areas where they could operate, the liberalisation of the industry erased those limits drastically, allowing companies to compete everywhere and offering all the products in the range. In order to defend their position in the market, building societies responded in different ways; there was a group of organisations of medium size, which perceived the opportunities arising in the industry and decided to turn down their mutual principles to become plc. Through the demutualisation of the 90's, several building societies refuted their conditions to have more access to capital, without limitations. Apart from this strategy, other building societies of smaller size adopted the merging option, pulling together resources and customers. In that way, they could fight against increasing competition on a better basis. Finally, the small building societies, those that, because of their size, were not interesting enough for bigger players, have found themselves in the situation where their surviving strategies must be focused on niche marketing and getting closer to customers. This can be perceived as a reverse to the foundational origins which stated that the constitutional priority for building societies should be their customers/owners. It seems that, (1) with the sophistication of financial customers who are not looking for a standard product, but a comprehensively valuable offer, specifically tailored for their needs and; (2) the increasing competition has put the figure of the customer under a new light.

Taking all those elements into account, it seems that Relationship Marketing plays a paramount role in the UK's financial services industry in general, and within building societies in particular. Actually, mutual organisations seem to be a step ahead at least, to what the building societies relationship refers. However, because of

the frenetic evolution of the market and the comfortable situation that building societies enjoyed prior to deregulation and increasing competition, those relationships between customers and their mutuality were not exactly well managed or filled with valuable propositions. Those have been reflected in the secondary position that building societies have (with the exception of the biggest players) in the industry market share. Actually, they have remained as an alternative for old customers with low generation replacement figures. In these circumstances, building societies have to look back to customers and their needs, in order to provide them with the services that will satisfy those evolving changes. The emphasis now is in engaging customers on a relationship with an organisation which has a strong personality (values and mission clearly established towards customers), and competitive products.

In this way, cross-selling and up-selling strategies have been perceived by the respondents as key players of customer retention and their relationships with their respective building society. In contraposition to other financial services providers, including the case of Company A, although it is a mutual company which also responds to other market and organisational criteria, building societies in general, and Company B in particular, embrace the ideas of cross-selling from the only perspective of satisfying their customers. Additionally, they understand the ideas of cross-selling and up-selling as a corporate duty in order to assist their customers in their journey of financial needs. The kind of goal that building societies are trying to reach is the transition from a mere financial service provider with some special features, to become financial advisors where customers will receive immediate satisfaction for their financial needs from products already existing in the market, or from the creation of tailored ones.

Whilst the problem of implementing cross-selling and up-selling strategies in the Spanish insurance industry was more in the organisational perspective, for building societies and Company B this is not the case. Due to over a century of organisational culture focused on customers and working on their behalf, the culture of the organisation towards customers is already settled. Moreover, as a consequence of this

long traditional culture, staff engagement with those principles is embedded. However, the main barriers and limitations come from disposable resources to put into practice the design of effective cross-selling and up-selling strategies.

From the quantitative approach the main findings are as follows:

#### 9.3.2.1 The validity of the framework

As for Company A, the validity of the results for Company B was assessed in different ways. Regarding internal validity, the analysis was replicated in three randomly selected samples of the transactional data base where the models were run (training), tested (testing), and the best one selected (validation). In addition to this, throughout the analysis chapter continuous information about the particular goodness of fit of the data mining and statistical techniques used, was provided. This just reflected the extent to which those techniques were performing in their objective of explaining several aspects of the design of the strategies to cross-sell. From the perspective of the external validity of the results, and its implications, the findings were presented to one of the Chief Executives and to the New Products Development Manager. During those meetings, the research was assessed and they tested whether the results made any sense matching their knowledge as Company B's insiders. The results of that examination were very positive and they are, at the moment, contemplating their immediate implementation.

#### 9.3.2.2 Individual cross-selling strategies

The specific retention strategies discovered for Company B, using cross-selling and up-selling opportunities, have been tailored for four segments of customers identified in the data base: First Nest, Young Savers, Heavy Investors and Future Planners. Those four clusters have been shown to display significant differences in their purchase behaviour and socio-demographic profiles. Once again, by combining those peculiarities, it has been possible to gather an understanding of the relationships which exist between products.

### 9.3.2.3 Relationships between products consumption

There were products identified that are clearly mutually linked to other policy categories, mainly of an investment nature. On the other hand, products like mortgages generated cross-selling opportunities, in the form of investment products, but did not happen in the same way the other way around. In addition to this, there are some investment products that, apart from receiving significant cross-selling opportunities, are a clear target for up-selling due to their repurchase rates. As it happened with Company A, the use of the Markov Chain Process did not seem to be appropriate. Although the product category acquired at any repurchase was directly influenced by the product acquired immediately before, this influence did not remain constant due to the influence of the customer life cycle in the evolution of customers' needs.

### 9.3.2.4 Factors influencing the repurchase probability

According to the analysis of the repurchase decision conducted, the variables with a clear impact on the probability of acquiring a second product are:

1. Length of the relationship: for the first two clusters it has a positive impact while it is the opposite for Cluster 3 and Cluster 4;
2. The first product acquired previously: this is clearly linked to the evolution of the consumption of each segment;
3. Maturity Life of the first product : Heavy Investors and Future Planners incorporate the influence of the Maturity Life of the first product with a negative influence suggesting a preference to acquire "fast" products;
4. Customers' age when starting the relationship with the organisation: with a negative influence possibly referring to the proximity to retirement.

### 9.3.2.5 Time analysis

Finally, the temporal analysis has proved again to be very valuable due to the differences shown at each cluster. The inter-purchase dimension increases for the clusters where the consumption of mortgages is significant. On the other hand, the clusters where investment products are the most acquired, present smaller lapses of time between purchases.

### 9.3.3 Overall findings

In conclusion, this research project has firstly determined how the conditions of both the Spanish insurance industry and the UK building society industry are favourable for the development of customer retention through the development of well designed cross-selling and up-selling strategies, all of which emerge from the Relationship Marketing and customer retention concepts.

Cross-selling and up-selling as part of the concepts relating to customer retention and Relationship Marketing, should receive more attention from the literature and in the financial industry. Particularly, cross-selling and up-selling have been pointed out by the respondents of this research as key strategies not only to survive, but to ensure the correct management of customers and their retention for long periods of time.

In addition to this, the analytical results have provided some interesting findings about, for example, how the repurchase decision is clearly influenced by the length of the relationship between customers and their providers and how previous purchases have an impact on future acquisitions. Once again, it can be found that the debate and the difficulty to determine the direction of the relationship of causality between cross-selling and up-selling and customer retention. As it was not part of the scope of this research, and the fact that the results are not exhaustive, the virtuous cycle explained before (Figure 9.1) will be used as the context where cross-selling and customer retention get together. Whatever the case, respondents coincided on the necessity of being able to design effective cross-selling and up-selling strategies that will be linked to higher customer retention figures.

When approaching the design of cross-selling and up-selling strategies, the first question should be about the possibility of having a generic set of strategies for each company or if as the customer life cycle theory and all the research conducted on segmentation suggests, consumption differs from customer groups and evolves with customers' circumstances. If that is the case, then the design of those cross-selling and up-selling strategies should take into account those differences and evolution. In

order to answer this question, an analytical framework such as “Who-What-When” could help to test those differences. By using several techniques (K-Means Clustering, Homogeneity test, Markov Chain Process, Logistic Regression, Survival Analysis), the use of a generic cross-selling and up-selling strategy was dismissed as it did not really reveal the idiosyncrasy of the consumption observed from different customers. Actually, as customers move in their life cycle, consumption follows and changes according to their circumstances. Understanding these cycles is crucial for any company to generate effective retention strategies.

However, acknowledging differences between customers is not enough to make generalisations about consumption. One of the results obtained has shown how two groups with similar socio-demographic profiles might end up selecting different consumption paths. Therefore, the analysis of customers’ acquisition patterns should also be a key objective for financial companies. In addition to this, if as a result of changing life circumstances consumption varies, companies also have to scrutinise the evolution of product consumption and the relationships between products (unidirectional or bidirectional), that will be the basis for designing the cross-selling strategies.

Finally, from the analysis it was observed not only that customers buy different products at different stages depending on their circumstances, but also how the repurchase decision and its timing vary. In conclusion, checking on the inter-purchase lapse of time can be a sound way to determine when cross-selling and up-selling efforts should be deployed.

Some of the key factors influencing the repurchase behaviour are:

1. The significance of age on the segmentation process of financial consumers.
2. Customer Life Cycle theory and how it affects the retention strategies and the design of cross-selling and up-selling policies.
3. Interdependency between purchases and products, how the product acquired today has an impact on the product category that will be acquired in



the future. In relation to this product dependency a deeper analysis was conducted in order to highlight significant product interconnections.

4. Product categories links: the influence of the product acquired first, which has been discovered and proved to change from segment to segment.

5. The relevance of the channel on repurchase

6. The impact of the length of the relationship, although for younger customers the length of the relationship has a positive effect on the repurchase probability. It seems that for the older groups the impact is the opposite. This impact of time has been observed on the repurchase likelihood when long and short maturity products are involved. Actually, long life products (i.e. mortgages) apparently reduce the chances of customers acquiring another policy while products with an annual renewal increase it; and

7. The analysis of time and how the repurchase sequence changes from cluster to cluster has been demonstrated. If it does introduce more complexity into the model, its presence seems to be fundamental to have a deep understanding of customers and their consumption.

#### **9.4 Research Contributions**

This section summarises the main contributions that have been derived from the analysis of the qualitative and quantitative data collected.

##### 9.4.1 Customer Retention and Cross-selling in the financial services industry

The first point to mention in terms of the contributions of the research relates to the fact that this research has stated the case of the relevance of customer retention and cross-selling in the financial industry in general, and for mutual companies in particular. Actually, it has determined how factors on the supply and demand side have favoured a mentality and strategy change in financial services providers, regarding the role that their customers played in the organisation. As a result, financial organisations have moved to the idea of placing customers in the centre of the organisation in order to build long term relationships. In this line, Li *et al.* (2005) suggested that industries, such as financial services, where customers face some

uncertainty about the quality of the product or service being offered are especially prone to develop the idea of Relationship Marketing. Additionally, the nature of the services industry which forces the buyer into intimate contact with the seller, facilitates the creation and reinforcement of relationships (Lovell, 1983; Norman, 1984; Crosby *et al.*, 1990; Price *et al.*, 1995; Evans *et al.*, 2004).

Managers have started to acknowledge that retaining customers is not sufficient to be successful and many seek to enhance the value of their customers by expanding the range of products and services that they buy from the firm (Blatterberg & Deighton, 1996; Rust *et al.*, 2000 and Verhoef *et al.*, 2001). This shows the second major contribution from the research regarding the relationship between cross-selling and retention. In this way, the study has proved that from a quantitative perspective the suggestions announced by Swan and Gill (1997) and by Reinartz and Kumar (2003) about how customers with lengthy relationships with the organisation become more conscious of the value offered by their provider, are more prone to remain as customers.

#### 9.4.2 “Who-What-When” Framework

Continuing with the analysis of cross-selling, this research project has provided the industry with an analytical framework that seems to be able to deploy valuable results about effective retention strategies linked to cross-selling and up-selling for financial service providers. Actually, although predictive modelling in the arena of packaged goods has received much attention from the research community over the last two decades, it has not been the case for the services industries.

As Leach (1999) suggests, the better the financial institutions know their customers, the better their ability to understand and predict future customer needs. With this in mind, the information technology revolution and the incorporation of data warehousing, data mining and statistical techniques are having a beneficial effect on organisations and their endeavours (Cho and Ngai, 2003). This research has shown how a systematic analytical approach and the use of a set of data mining and statistical techniques can help companies identify prospective business opportunities

and manage customer segments, depending on their financial needs and characteristics. Therefore it can be concluded that the last contribution of this research is aligned to the design of an analytical framework which adopts the need to include as much information available about the customers of companies. The Who-What-When framework models the evolution of the demand observed in customers for multiple products acquisition. As a result, a sequence of the product acquisition pattern has been derived from customers' needs at different stages of their life, and with different financial maturity levels. The fact that the framework has been used by combining different approaches and its application on two populations (customer database), suggests a stronger validity of the results that have provided an explanation for the purchase behaviour of customers aimed at exploring cross-selling and up-selling opportunities. The last stage, returns to Liu, Leach and Bernhardt's argument (2005) about the relevance that collecting customer information has for financial companies to make an efficient use of their resources by approaching the right customer, with the right product and at the right time, within the context of customer retention.

Moreover, the combination of the results provided by the "Who-What-When" has offered the industry a way to translate the theoretical concept of "The Customer Life Cycle" into a practical tool that they can use to discover the evolution of financial customer needs and how it applies to their product consumption. Actually, those findings also coincide with the contribution of Kamakura, Ramaswami and Srivastava (1991) about how financial maturity evolves from convenience products, to stable income products, to finally riskier products. However, the contribution of this research goes a bit further by relating that evolution to specific customers' characteristics and time implications.

#### 9.4.2.1 The Who: the value of segmentation in the financial industry

In Harrison and Ansell (2002), the financial services industry has been shown to be a natural environment for segmentation where socio-demographic characteristics have an influence on consumption behaviour. The introduction of the segmentation stage ("Who") categorising customers and their purchase behaviour has not only

reinforced the validity of segmentation in the financial industry, but also its relevance when defining tailored retention strategies.

#### 9.4.2.2 The What: links between products and purchases

At the second stage (“What”), the acquisition pattern analysis has proved useful in identifying suitable cross-selling leads. Acquisition pattern or sequence analyses have been used successfully in a number of contexts to describe the order in which customers have acquired products and services, such as durable products or financial services (Paas and Molenaar, 2005). In addition to this, consumers frequently purchase multiple products and services from the same provider over time (Li *et al.*, 2005). Therefore, understanding the effect of socio-demographics, purchase behaviour characteristics and previous acquisition was significant to develop appropriated cross-selling and up-selling strategies in the context of customer retention. Kamakura *et al.* (2004) already suggested that the analysis of past purchase patterns for related product/services would help in the identification of the customers that are more likely to be active in the future.

#### 9.4.2.3 The When: the dynamic component of consumption

Finally, the introduction of the time dimension in the model (“When”) has identified the impact of time on the repurchase probability and how it does not only change based on the characteristics of the customer (older people buying faster than younger customers), but also how it is highly influenced by the kind of product acquired and their maturity life (long-life product acquisition does not promote repurchase as clearly as short-life products do). As Li *et al.*, (1995) stated, the existence of sequentially developed demand for financial products offers substantial opportunities for companies that carry multiple products and services to cross-sell other products to their existing customer base.

### **9.5 Limitations**

Even the best research with the biggest impact in terms of its contribution to the creation of knowledge, will not be free of limitations. Therefore, finding them in this study is not surprising. Actually, the realisation that it has limitations and room for

improvement is a good critical exercise that offers the possibility of continuing research.

#### 9.5.1 Case Study as research technique

The use of case studies has offered an attractive way of illustrating and conveying the rich detail of various kinds of events. As a research method, however, its status remains somewhat dubious. Its main criticisms come from two areas:

1. The approach has not been employed in a sufficiently scientific way to advance theory;
2. The case study does not lend itself to generalisation.

Although the first limitation has been somehow overcome by the utilisation of the quantitative approach in the design of cross-selling and up-selling opportunities, the second one remains a worrying factor. So far, this study has been replicated in three financial companies (Company A, Company B and Company E - for the pilot study). However there is still the question if these three companies are adequately representative of the financial services industry in general. Probably the answer is no. Nevertheless, the richness and depth of the detailed information obtained through the utilisation of the case study technique compensates it.

#### 9.5.2 The financial services industry

It has been mentioned that there are certain industries where the ideas of Relationship Marketing, customer retention and cross-selling make more sense than in other sectors. Berry in 1995, mentioned that the high variability of service provision is making many customers more likely to seek continuity with the same provider where excellent service is experienced, particularly when that service is important, complex and/or when the customer is highly involved. Despite the fact that new entrants have entered the market with innovative business propositions which dismiss the value of personal contact (i.e. Direct Line and other providers using the Internet as the main contact channel with customers), there is still the belief that financial products acquisition is a complex process requiring advice from the provider. In this situation and as suggested before, customer retention could be a natural component of the

industry. If that was the case, this research would start from an advantageous position and its results should be restricted to other industries with similar features.

### 9.5.3 Mutual companies

Another source of limitations comes from the characteristics of the firms which agreed to take part in the research. Both organisations are mutual companies, although Company A, has a business model more flexible and close to normal plc organisations. As mentioned before, a mutual organisation is one that is owned by its customers (Armitage, 1997). The modern explanation for the continued existence of mutuals is that when the main business is managing funds, policyholder ownership of those funds provides a way of controlling management (Fama and Hensen, 1983) and the absence of shareholders avoids costs arising from the conflict of interest between policyholders and shareholders (Mayers and Smith, 1981; 1986 and 1988; Hasnmann, 1985). Management then is controlled by dissatisfied customers' ability to remove, directly, the assets managed. The question here is whether such a special interconnection between the organisation, customers and ownership might have an influence on the validity of the concepts of relationship marketing and cross-selling.

From answers received from the participants on the qualitative stage of the research project, it seems that although keeping customer centred should be a differentiating feature of mutuals, in reality they have gone, to some extent, with the flow of the rest of financial services providers forgetting about customers and their satisfaction (Venetis and Ghauri, 2004). This realisation is quite disturbing as it was expected to have found out how mutuals were a step ahead of other financial institutions in customer retention and relationship building. Presently, when mutuals have apparently come back to their origins about working on behalf of their customers, it can be expected that those concepts of retaining customers will have a deeper effect on this type of organisation due to the existing alliance between customers and organisations (Tayler, 2005). The final point to take into consideration when analysing the results obtained for mutual companies is that in contrast to plc's, the primary objective is not about spectacularly increasing the profits account (Ferguson and McKillop, 1992). Actually, their main objective moves towards satisfying

customers in such a way that the commitment between both parties will be reinforced, moving away from the relationship of provider, customer and embracing the idea of advising customers on their financial needs.

#### 9.5.4 Data

Regarding the data collected in both databases, they just cover some socio-demographics and transactional records featuring customers' buying behaviour. However, past-purchase data from customers have some limitations for the selection of prospects for targeting consumers of new products or services coming to the market (Kamakura *et al.*, 2004). In addition to this, the assumption that prospective repurchase only depends on the socio-demographic characteristics of certain customers and on their past behaviour, which was shown in relation to the acquisition of financial products is quite limited. In the last decade, the interconnection between customer satisfaction and customer retention has gained much attention in the literature (Verhoef *et al.*, 2001). Actually, there is now enough evidence of higher satisfaction levels leading to higher purchase intentions (Anderson and Sullivan, 1993; Mittal, Kumar and Tsiros, 1999; Bolton, 1998; Bolton *et al.*, 2000). Together with satisfaction, other motivations such as brand image (Aaker and Keller, 1991), identification with the organisation, the social responsibility shown by the firm, loyalty and more emotional aspects included in the decision making process of repurchase have not been included in the analysis. Therefore, the affective aspects influencing customer purchase behaviour have been ignored. This can be taken as a serious limitation when it has been stated that the nature of the financial industry business shows a tradition of personal interaction and commitment between the customer and the provider.

In line with other factors affecting the repurchase decision, although there is relatively detailed information on customer-level account activity, the datasets do not reflect the effect that the marketing activities had on the customers exposed to them (Li *et al.*, 2005). If such information was available, it would be possible to explore more formally the impact of marketing variables on cross-selling results to test

whether they were the consequence of a natural need in the customer or if, on the other hand, they were favoured by other aspects.

As Jarrar and Neely (2002) have suggested, the introduction of data that at the moment are not present on Company A and Company B's databases, is crucial to have a 360 degree view of the customer. Their suggestion was along the lines of enriching the databases with information about customer needs, customer complaints, customer contact history or customer financial profile amongst others. Although it is true that some of those variables are not in the current study, it has to be accounted for that there are some limitations to get access to that richness. The Data Protection Act in the UK and its equivalent in Spain (la Ley de Protección de Datos) were created following the guidelines of the European Commission regarding customer data gathering and utilisation (Peelen, 2005). Therefore, those two legal tools limited to some extent to the type of data that customers can hold, the length of time to keep it for on their databases and their use of it.

The amount of data used is also a source for other kind of limitations. Some researchers (Kamakura *et al.*, 2003) have indicated that the use of a single data base, in this case the transactional data base of the company, is not sufficient to determine cross-selling opportunities as it misses the possibility of customers already holding policies from other competitors. This means that, at the moment, results obtained from the analysis clearly suggest a partial view of the financial consumption. As there is no complete data about the total consumption of financial products that customers make over their lifetime, a definitive proposition for cross-selling and up-selling opportunities is not possible. It might even be the case that the same products are consumed at different stages from other competitors. Moreover, as none of the companies offer an entire spectrum of financial products, some opportunities might be missing. As a result, the findings should be taken with some caution, bearing in mind that they are only applicable to the products and circumstances of similar organisations.



### 9.5.5 “Who-What-When” Framework

The limitations derived from the Who-What-When analytical framework concentrated on three main areas. Firstly, although it has been claimed that it is a very complete way of understanding customers, the fact that there are no data regarding significant aspects of the repurchase activity, will to some extent, dismiss its value. It is true that within the available information the model is as complete as possible. Actually, it is more complete than other studies that have only focused on one of the stages of the framework. However, with the introduction of more data, a higher validity of the results and implications would be expected.

Secondly, the techniques used at the different stages of the analysis have their own limitations. For example, the K-means Clustering technique has the limitation of the arbitrary decision of the number of clusters to be analysed. Usually, this decision corresponds to the researcher and therefore it is arbitrary. Despite the fact that there are several tools assisting in such a decision, there is always a trade-off between increasing complexity and being as explicit as possible at gathering the relevant information of the segments. In addition to this, the survival analysis assumes that once a customer “dies”, he will not purchase in the future, which is not a good assumption as far as there can be reactivated customers and there are customers with different inter-purchase periods of time (Blattberg *et al.*, 2000). Moreover, within the transactional data, different purchases have been recorded as discrete purchase episodes from the company’s perspective. Therefore, multiple purchases at an individual point of time do not exist in the data set. In case of acquiring two products at the same time, each product has been recorded individually with the same date and respective premium values. For the time analysis, in these cases the lapse of time between purchases will be zero. If this situation occurred very often, the results of the survival analysis would be influenced by reducing time periods between purchases.

Finally, the Who-What-When model seems to work well in theory, based on the data provided. Furthermore, the general implications that have derived from it in terms of customers and their consumption, have been verified in a kind of external validation

exercise by the managers of both companies. However, its applicability in the market still remains uncertain and whether it will finally deliver the promises in terms of cross-selling, up-selling and retention. At present, it is apparently a sound framework that needs to be tested in the market to completely validate it and its results. Although this was never the objective of this study, due to the scientific realism position underpinning this research and the desire to contribute to the validity of the concepts of cross-selling and retention in the financial industry, the verification of the model and consequent improvement would definitely make a contribution and move forward in the current understanding of the links between customer retention and cross-selling.

#### 9.5.6 Where is the customer's perspective?

This project has only taken into consideration the perspective of business at the data collection and data analysis stages in order to give a solution using cross-selling and up-selling to promote retention within the context of Relationship Marketing. However, the question to answer at this stage concerns whether customers want that relationship. It has already been mentioned that customers seem more open to newer and more enhancing forms of marketing because of the overwhelming amount of offers and promotions that they receive regarding financial product acquisitions (Sisodia and Wolfe, 2000). Literature from the customer perspective, has suggested that customers might value continued relationships with existing suppliers because of the advantages in terms of risk reduction, simplification of buying decisions and greater sharing of information (Peterson, 1995; Seth and Parvartiyar, 1995; Gwinner *et al.*, 1998 and Gruen 2000, Evans *et al.*, 2004). However, it cannot be deduced from this research that customers actually want to be retained by companies or by any financial institution. Moreover, how customers perceive the attempts of financial services to cross-sell or up-sell their products is substantial information that is missing. Despite the fact that financial companies might try to cross-sell their products with the objective of offering a complete response to customers' needs in order to reinforce the bonds existing with them, it may happen that customers perceive it as an attempt to be sold off. The understanding of how customers perceive the cross-selling and up-selling strategies and whether they actually connect those

with higher satisfaction and stronger relationships with the providers, are crucial to continue any research on this area.

#### 9.5.7 Other ways of promoting customer retention

Although the focus of this study has been placed on cross-selling and up-selling as ways of promoting customer retention in the financial industries of Spain and the UK, there are other ways or strategies that financial services providers can use with the retention objective in mind. Peelen (2005) identified several alternatives can be used instead of cross-selling and up-selling, these are for example: 1) rewarding existing customers; 2) promoting loyalty between customers; 3) increasing switching costs; 4) using sophisticated sales promotions; 5) using the organisation as a club and so on.

The first alternative regarding the reward of loyal customers consists of defining different policies to treat customers, taking into account their loyalty figures (Lewis, 2004). Making customers aware of those differences and how they can benefit from better value propositions is an incentive towards their move upwards on the loyalty ladder. An example of this strategy could be the “silver, gold and platinum” categorisation that can be found on credit cards or bank accounts.

The second strategy about developing Loyalty Programs follows the maxima of offering incentives and coupons specifically tailored for individuals, based on their consumption behaviour (Uncles *et al.*, 2003). In the UK a clear example of this strategy is the TESCO Club Card and the entire infrastructure behind it.

Regarding the Increase of Switching Costs, companies are trying to prevent customers' defection by making the conditions for customers to break the relationship unpleasant or difficult (Yang and Peterson, 2005). This responds to the fact that any program to retain customers is normally a long-term investment which increases the return as time goes by (Lee *et al.*, 2001). Mobile phone companies are making an extra effort to up-grade their customers by defining advantageous offers in their contracts (i.e. new handsets, free minutes, insurance). However customers

can only benefit from them if they agree to remain customers for a certain period of time (usually 12-18 months). In the case of leaving the company before the contract matures, there are some penalties which the customer will have to face. In relation to the idea of using sophisticated sales promotions, some companies, for example, insurance services providers, offer a high discount if the holder of an existing policy takes on a second policy, for example 25% off with a second car insurance. The suitability of these aggressive promotional techniques has been questioned as sometimes they do not promote loyalty, but actually, they generate the reverse effect of encouraging promiscuity among customers (Evans *et al.*, 1997)

One of the main arguments underpinning the concept of Relationship Marketing and CRM is about identifying the most attractive customers to build those relationships with (Gummesson, 2002; Kumar and Shah, 2004)). This idea is based on the fact that companies have limited resources and they cannot attempt to invest money, resources or time when developing relationships with every single customer. In addition to this, there are customers who are less interesting from the companies' perspective to retain, maybe because of their promiscuity, low consumption rates, lack of response to the activities promoted from the organisation or basically just because they are not profitable enough to justify that cost. However, companies have to be aware that a customer who might not look attractive today, may be a very appealing target tomorrow, due to his evolution on the Consumption Life Cycle (Gourinchas and Parker, 2002).

Traditionally, the literature has used the concept of the Lifetime Value to look at the profitability level associated with each customer, taking into account today and tomorrow's potential profit (Venkatesan and Kumar, 2004). The Lifetime Value is the net present value of the future contribution by a customer to the overhead and profit of a company (Peelen, 2005). Hoekstra and Huizingh (1997), explain that the customer makes a contribution to the result if the income from transaction exceeds the expenses incurred in completing and maintaining the relationship. Nevertheless, the concept of the Lifetime Value has also some limitations. It is the calculation of the economic value of a customer neglecting the value of the non-economic aspects

of the customer-organisation relationship. It also completely ignores the value that the customer assigns to the supplier (Peelen., 2005). Another problem with the Lifetime Value concept is that, in practice, marketers very often analyse their databases as now they are, ignoring the fact that there are segments that are extremely dynamic (Evans *et al.*, 2004). Despite its limitations, having data which would allow the calculation of the Lifetime Value (or other index) is another limitation derived from the analysis. None of the companies analysed had any kind of record about customer profitability<sup>102</sup>. Actually, they are at the moment trying to find a correct measure of that concept. As a result of not having this information, the segments identified have considered to generate the same profitability. Therefore, the elaboration of a hierarchy of the segments where retention should be prioritised is not currently possible.

## **9.6 Further Research**

Based on the limitations listed in the previous section, there are several ways in which this study could be improved.

Firstly, in order to have a better understanding of the validity of customer retention and cross-selling and up-selling within the context of relationships, the sample of financial institutions should be increased. In this way, by introducing more organisations with distinctive features, it will be possible to assess whether customer retention and cross-selling are key strategic decisions for mutuals, or if, on the other hand, they are concepts of universal validity in the industry. The extension of the analysis to other corporations will mitigate the questions about how to generalise the results from only two case studies. This deeper investigation could be carried out in several countries which have gone through a similar evolution of their financial industries. Once a proper view of the validity of the results and the method has been assessed at a European level, for example, moving it to other countries (developing countries, undeveloped countries) could be a good exercise to evaluate the current

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<sup>102</sup> Company A has made an attempt to categorise customers with the classification Bronze-Platinum. However the doubts expressed by the organisation about its validity restrained the researcher to use it more extensively, as it could lead to incorrect conclusions.

situation of the relationship, customer retention and cross-selling concepts of the financial industries in other latitudes.

The limitations related to the financial industry presenting such special characteristics that could bias the relevance of the development of long-term relationships with customers, could be overcome in two different ways. The first way consists of replicating the research in other industries where customer data is available, such as telecommunications or tourism (airlines, hotels). The second suggestion moves towards conducting a comparative analysis about the level of implications that different services generate in customers. It is expected that those services where the customer is more involved in the purchase decision or where his/her implication is higher, will be more prone to develop the concept of relationship marketing. If this happens, any research in those service industries regarding customer retention and the cross-sale and up-sale of products, will be welcome.

In addition to the issues of the typology of organisations and/or the types of industries under analysis, the next way of improving this project and pushing forward the current understanding of retention and cross-selling comes from the customer's point of view. Regarding this matter, there are several lines of enquiry. First, it has to be asked what the real benefits that customers might obtain from the establishment of long-term relationships with their financial providers. Based on that, the next question is asking them to what extent they want to have "a relationship" with those providers. In addition to this, it has to be understood how customers perceive the attempts and strategies that financial services providers implement, aimed at increasing customer retention and cross-selling and up-selling figures. This perspective is crucial because if, for example, customers perceive that the efforts to cross-sell are just mere methods of being sold off to increase organisations' profitability, any activity of this type will be facing an obscure future.

Continuing from the perspective of customers, companies have to understand that on the repurchase decision there are a lot of factors taken into account. Some of them

provide observable elements like past behaviour, the type of product acquired previously, the channel preferred or the characteristics of the customer at the time of the purchase. However, there are other factors that should be included that make reference to the emotional attitude of the customer towards his or her financial provider. Due to the fact that customers are not always rational in their purchase behaviour, having an idea of that affective component which links customers to companies is crucial for the success of the organisation and of the retention strategies attempted. However, it has to be recognised that even if customers are asked about those factors, its interpretation and implementation in real courses of action will always be difficult.

With the objective of companies being able to grasp a proper understanding of the financial products consumption evolution which will be the basis for the design of cross-selling and up-selling strategies, more than the transactional datasets from a couple of financial services provider is necessary. In an ideal world, the collation of the transactional information of a significant proportion of financial providers should give a complete response to this limitation. Despite the accepted fact that obtaining data about customers' consumption from competitors is not easy and counting on it will be a very relevant piece of information. Its relevance not only relates to the identification of cross-selling and up-selling opportunities, but it will also help companies to understand the perception that customers have about them and their offers. For example, if a financial provider offering investment, lending and saving products, identifies a clear interconnection between lending and savings services, it might lead the organisation to think that this is the real cross-selling opportunity. However, by having access to the firm's customers' consumption from other competitors, another relationship can be spotted, for example lending and investment. Moreover, through this analysis, the organisation will realise that, in the mind of its customers, it is not recognised as a natural investment services provider.

In addition to this, the results will be much more comprehensive if apart from the emotional aspect of the repurchase decision, more data about customers were introduced. Together with the need to improve the information that will allow profiling customers in a better way (i.e. more socio-demographic data), the literature

has proved how there are other variables affecting customer retention and the effectiveness of cross-selling and up-selling strategies. For example, some kind of information about customer satisfaction will help to link the concepts of customer delight with customer retention. In the same way, the introduction of complaints or any other possible incident occurring between the organisation and the customer, would help to show the relationship in a better line.

Furthermore, it has been shown that marketing actions from the organisation itself or other social or legal aspects which have an effect on the decision of acquiring one or other product from the same provider, or from another. For example, if the company launches a marketing campaign offering discounts on the acquisition of certain products, it will clearly have a significant impact on the consumption pattern. However, it might not be a natural consumption that customers would follow under natural circumstances, without the promotion. Furthermore, legislation has also been taken into account, when determining the consumption path for financial products. In this way, the introduction of a tax free product for example, in order to promote savings or investment will also modify the natural acquisition pattern.

Regarding the data, the introduction of some type of customer profitability seems to be crucial in order to understand the most interesting/profitable customers to retain. Due to limited resources, financial services providers have to prioritise customers using some kind of index. Due to the dynamism of financial customers, segments that might not seem too interesting at the moment, may be the jackpots of tomorrow. Therefore, the definition of such a profitability index should be broad enough to take into account that dynamic component and the evolution of customers' attractiveness. While the literature discusses the suitability of one or other methods, the Lifetime Value concept seems to be a good start to overcome this issue and respond to the need to prioritise customers, identifying the most interesting for the company. This interest does not have to be directly related to economic income. There are other components like loyalty, image of the customer to start with, that could be included in the definition of what a "profitable" customer is for each organisation.

Regarding the Who-When-What framework, there are a couple of issues that could be improved. As it has been mentioned in the section covering the limitations of this



research project, all the techniques used in the analysis have their downfalls in terms of their assumptions or the way that they operate. However, there are other statistical and data mining techniques that could be used instead of, or together with, the existing techniques to corroborate the results. For example, the CHAID analysis could be used for segmentation based on the way that it categorises individuals by discovering the most discriminatory variables until further significant division is no longer possible (Peelen, 2005). Furthermore, time series analysis could be appropriated to forecast the volume of repurchase on short periods of time based on the impact that past errors or past behaviour of the dependent variable, might have for future decisions (Shumway, 1998). In addition to this, the analysis of the interconnections between products that have led to the definition of cross-selling and up-selling opportunities could be complemented by the use of Basket Analysis which measures the probability of several combinations of products occurring in the consumption of financial products.

Finally, the second concern about the Who-What-When analytical framework goes along the idea that it needs to be tested in real market circumstances. As it is at the moment, it looks quite sound and the responses obtained from Company A and Company B are very promising. However, it has to be implemented in order to see whether the implications derived from the analysis finally work in the customers' context. Once the framework has proved to work by promoting repurchase across different segments of customers based on the guidelines established for each of the segments, the next step concerns to retention. The objective here is determining whether the implementation of the cross-selling and up-selling program finally has a positive and observable effect on customer retention. Although this is not an easy task to carry out, some suggestions go along the lines of measuring the impact of those strategies on the defection rates or in the number of inactive customers, over a period of time. Whatever the approach selected, if companies can benefit from the Who-What-When framework, a deeper analysis will be worth taking over.

## **Conclusion**

This chapter has presented the main results obtained from a qualitative and quantitative analysis run for the case studies of Company A and Company B.

Throughout the investigation, the relevance of customer retention has been explained as a combination of the process of change experienced in the supply and demand sides of the financial services industry. After assessing the validity of customer retention, the next area focussed on asking participants about whether cross-selling and up-selling were significant in their industries and the main barriers associated with their implementation. In short, the main theoretical contributions suggest that customer retention is one of the most important strategies in industries like the financial services providers, where competition has increased and customers have become more sophisticated. In addition to this argument, it seems that companies value very highly the role that cross-selling has to play in their strategies given the financial benefits associated to increasing customers' share of wallet, but also because of the impact that it seems to have on customer retention plans. Ultimately, this strong link between customer retention and cross-selling has been proved not only by the comments provided by participants, but also when modelling repurchase decisions. In those models, the length of the relationship has a clear and positive impact on increasing the probability of customers acquiring more products from the same provider. A second concept derived from the modelling process, reflects that the usage of the direct channel, without intermediaries, for product acquisition is key to enlarge the prospects of future purchases.

Finally, the chapter has summarised the most significant findings obtained after applying the "Who-What-When" framework in order to design specific cross-selling and up-selling strategies aimed at helping improve financial services providers' retention figures. The practical contribution of this thesis regards the suggestion of adopting a systematic approach to identify cross-selling opportunities for the participant companies. For financial service providers, the validation of the "Who-What-When" framework is crucial as it suggests that cross-selling and customer retention programs based on repurchase have to be done by taking into account customer characteristics, consumption patterns and times of the repurchase decision. Following this argument, it has been concluded that consumption life cycle has a significant impact on what customers acquire today and on what customers will acquire tomorrow. In this line, the framework has managed to prove the existence of

a diversity of relationships, sometimes weak, sometimes strong, between the products offered by one company. Understanding which products lead to further consumption is crucial to succeed on developing cross-selling and up-selling strategies. Finally, the time when the decisions have been made is a key factor to bear in mind when developing cross-selling strategies as different product's maturity and customer situation will expand or shorten the inter-purchase time lag. Identifying the right time to contact customers with an offer will help companies succeed around their repurchase and customer retention targets

Therefore, customer retention has an important role to play in the industry, a role that becomes more interesting due to the virtuous cycle identified between customer retention and cross-selling and up-selling. After reviewing the research process and the key findings, this section has summarised the main contributions derived from the study. Actually, it is proved to have had an impact from a conceptual perspective, corroborating the value of theories like the Customer Life Cycle and testing the hypothesis about the relationship of customer repurchase and length of the relationship between organisation and customers. Additionally, it has taken a practical perspective suggesting a framework of analysis for discovering cross-selling and up-selling opportunities. If the elements of the framework are now novel concepts (segmentation, acquisition pattern analysis or its time dimension), this research is the first attempt of pulling them all together and integrating their results.

A critical evaluation of the main limitations found throughout the research process has been followed by the different ways in which this project could overcome those limitations and how new lines of research could be followed on from this thesis.

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# Appendices

## Appendix One

### Review of Relationship Marketing Definitions

Definition	Author, Year
Relationship Marketing in the service context aims at attracting, maintaining and enhancing customer relationships	Berry, 1983
Relationship Marketing is a strategy to facilitate and maintain long-term customer relationships with customers which cannot be imitated by competitors and therefore provide sustainable competitive advantage	Berry and Greshan, 1986
Relationship Marketing is a school of thought in marketing, beyond the commonly accepted schools: commodity, functional, regional, institutional, functionalist, managerial, buyer behaviour, activities, macromarketing, organisational dynamics, systems and social exchange	Seth, <i>et al.</i> , 1988
Relationship Marketing is a marketing approach that concerns attracting, developing and retaining customer relationships.	Berry and Parasuraman 1991
Relationship Marketing is to establish, maintain and enhance relationships with customers and other partners, at a profit, so that the objectives of the parties involved are met. This is achieved by a mutual exchange and fulfilment of promises.	Gronroos, 1994
Relationship Marketing emphasizes a long-term interactive relationship between the provider and the customer	Gummesson 1994
Relationship Marketing refers to all marketing activities directed towards establishing, developing and maintaining successful relational exchanges	Morgan and Hunt, 1994
Relationship Marketing involves multiple linked exchanges extending over time and usually involves both economic and social bonds	Wilson and Jantranna, 1994; Lehtinan and Mitilla, 1995
Relationship Marketing is concerned with the development and maintenance of mutually beneficial relationships with strategically significant markets	Buttle, 1996
Relationship Marketing is a multifunctional and integrative activity involving functions across the organisation, with emphasis on facilitating, building and maintaining relationships over time	Coviello, <i>et. al</i> , 1997
Relationship Marketing is a philosophy of doing business, a strategic orientation that focuses on keeping and improving current customers, rather than acquiring new ones.	Zeithaml and Bitner, 2000
Relationship Marketing includes the development and management of relationships in six markets, namely: internal, customer, referral, supplier, influencer and employees	Veloutsou, 2002
Relationship Marketing focuses on developing long-term bonds with individual customers	Roberts, <i>et al.</i> , 2003

Sources: Wikström, 2008; Aryan Hellas Limited, 2005

Appendix 2: Overview of Pilot Study,  
The Origin of the “Who-What-When” methodology

The pilot research focused on describing a set of tools to analyse customers’ databases, which would fit within the overall strategy of retaining customers under the concepts and influences of CRM. The goal underpinning this set of tools was to identify, understand and evaluate the purchasing behaviour of a company’s customers, and thereby enable the company to design appropriate offerings that encourage retention. Basically, the questions under analysis are the following:

- a) How can customer segments be identified?
- b) What cross-selling opportunities can be defined within each segment?
- c) Which is the effect of time in the repurchase behaviour?
- d) Which factors influence this repurchasing behaviour?

This analysis was disaggregated into three stages in order to make the study and the results more understandable.

The first stage was segmentation. This is concerned with grouping individuals or organisations that are similar in terms of how they respond to a particular marketing mix and that are meaningful for marketing planning purposes (Myers, 1996). The rationality for segmentation in this particular research rested on two main factors. First, it was been stated the necessity of identifying the most attractive customers to enhance them in a durable and fruitful relationship. On the other hand, customers’ wants and needs evolve and depend on many issues in particular, their life stage, socio-demographic characteristics and economic factors (Donnelly et al., 1985; Harrison, 2000).

In this project, post-hoc descriptive methods of segmentation were used to identify customer’s groups that were homogeneous along a set of measured characteristics (Wedel and Kamakura, 1998) such as socio-demographic variables (i.e. age, marital status) and purchase behaviour features (i.e. number of products, length of the relationship). Cluster analysis, using K-Means, segmented customer into groups with

different life-stages and purchase patterns associated. Punj and Stewart (1993) stated that this technique, along with other non-hierarchical clustering techniques, is generally superior in terms of accuracy of results than hierarchical ones.

The second stage was forecasting future purchase behaviour in order to identify two main factors. We were interested in predicting the cross-selling and up-selling opportunities for the company. Also it was important to identify when those opportunities are more likely to occur. This emphasis on predicting purchases would help companies design sound retention strategies.

Cross-selling (up-selling) implies increasing the number of products or services to current customer/group of customers of the company. Cross-selling (up-selling) has been considered as one of the main CRM tools to strengthen the relationship with customers (Kamakura et al., 1991). As customers acquire additional services or enlarge the ownership of those already purchased from a vendor, the number of contact points between customer and company increases, generating potentially higher switching cost for the customer (Kamakura et al., 2003).

Several Techniques were used during the pilot, K-Means Clustering, Discriminant Analysis, Cox Regression and Survival Curves and Purchase trees. The segmentation stage used K-Means as the clustering technique and to validate the results, Discriminant Analysis was conducted. The description of the purchase pattern was estimated by using Purchase Trees that consist of two main elements. On one hand, the “observed next products bought” are disclosed which deviates from the most popular product per each segment. In this way, cross-selling (buying other products from the company’s portfolio) and up-selling (acquiring the same product but upgraded or with better conditions) patterns were discovered. Further, the probability associated with each product was calculated, which enabled the strategies that were more likely to succeed to be determined. Complementing this descriptive technique, more sophisticated tools were used to predict repurchase behaviour. The first technique, the Logistic Binary Regression was used to understand how several

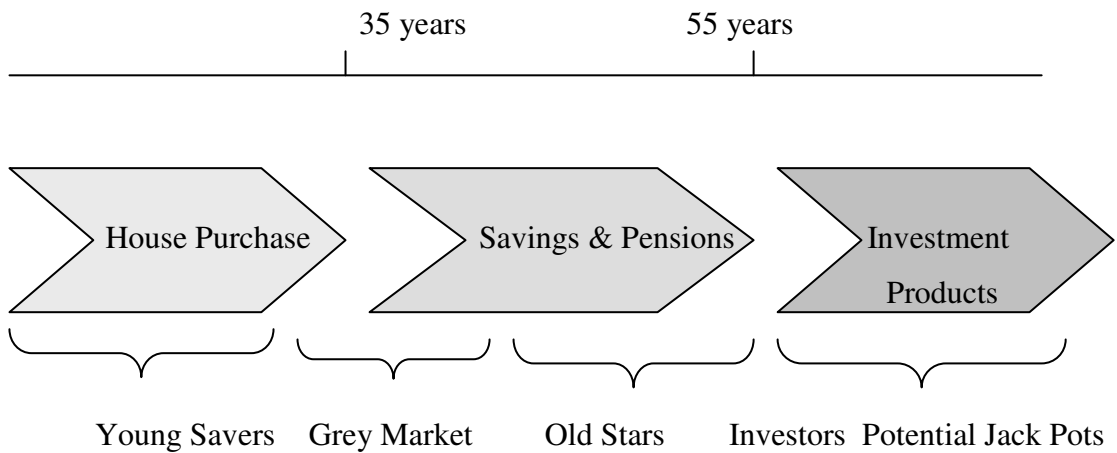
factors (i.e. socio-demographics, past purchases, segments) affected the repurchase of more products after the first purchase. This techniques is highly recommended when the dependent variable (“buying more than one product) is dichotomic (0= not buy; 1= buy). Finally, survival analysis, using Cox Regression, modeled the occurrence of events based on a time analysis and assesses the influence of both discrete and continuous covariates (Stare et al., 2001). Moreover, it provided the time influence on the repurchase probability through the Survival Curves (Allison, 1995).

The data set belonged to an eminent Scottish insurance company located in one of the most important financial centres in the UK. The file, as extracted from the company’s data warehouse included records of around 4000 customers. The attributes that considered in this study included socio-demographic variables as age, marital status, ACORN classification, gender, and transactional data as number of purchases (with a maximum of five and a minimum of one), products consumed, premiums, date of consumption, products acquired and customers’ value.

From the result, it was demonstrated that the deeper financial institutions know their customers, the better their ability to understand and predict customers’ needs (Leach, 1999). Organisations committed to collecting and storing customer information using data warehouses and analysing the data using data mining techniques can be proactive and place themselves ahead of their competitors. This study demonstrated how, using a toolbox of data mining techniques on a data warehouse, companies can identify cross-selling and up-selling opportunities in both terms of products and time. In this way, it is possible to offer the right product to the right customer at the right time.

The segmentation analysis had shown that the ability of classifying customers into groups (five segments in this research), not only provides a comprehensive image of the customer’s socio-demographics, but also has an impact on predicting consumption as it changes over the life cycle stage. Figure App.2.1, describes the natural consumption cycle for this company.

Figure App.2.1: Life Cycle Consumption: Age, Generic Products & Segments



The main conclusion was that there was a logical progression in the consumption of financial products which started with the necessities associated with the purchase of the house, passing into a phase of saving followed by a phase of disposal during retirement, and finishing with investment products where customers could gain additional benefits from the spare income.

The Survival Analysis revealed two main findings. The relevance of “Recency” (1.83 years between Purchase 1 and Purchase 2) was established. As time passes following a purchase, the probability of repurchase reduces. This factor should encourage firms to maintain regular contact or following up with customers in order to promote successive sales.

The Survival Equation stated the relevance of “value” (positive relationship), number of products (positive relationship) and the length of the relationship “company-customer” (positive relationship) in the repurchase probability over other factors related to socio-demographic characteristics. The combination of those three variables could be considered as a “proxy variable” denoting the relationship

between the company and their clients. This conclusion supported the relevance of well managed relationships in retaining customers through cross-selling and up-selling strategies.

Finally, the findings observed with the Survival Analysis were confirmed by using the Logistic Regression. Once again, the repurchase probability relied upon factors denoting the customer's relationship with the company (i.e. length of the relationship, value) with the incorporation of direct sales channel as another factor promoting future repurchases.



### Appendix 3: Quantitative Analysis Company

#### **Section 1:**

#### Company A: Table of Variables

Variable	Values
Gender	Male Female
Age	years
Marital Status	Single Married Divorced Widow/wr
Channel <sub>(1,2,3,4,5)</sub>	Direct Channel Financial Institution Intermediaries
Total products	
Life at the firm	years
Product <sub>(1,2,3,4,5)</sub>	Savings Car insurance Home insurance Risk/life Accidents
Value	Nickel Bronze Silver Gold Platinum
Profitability	Index (1-100)
Age at starting relationship	years
Purchase Date <sub>(1,2,3,4,5)</sub>	Date
Life of product <sub>(1,2,3,4)</sub>	years
Census (1, 2, 3, 4)	Repurchase =1 No repurchase =0
Premium <sub>(1,2,3,4,5)</sub>	Euros
Area	Alava Guipúzcoa Vizcaya Navarra La Rioja Cantabria Rest of Spain
Professional Activity	Health Liberal Occupation Manufacturing Artist Admin Civil Servant Transport Hospitality Retail Sales Technician Unemployed Managerial Student Engineer Retired Army Housewife Other

**Section 2:**

Company A: Testing Order Zero Condition- Markov Chain Process

Condition 1: The types of policy acquired are independent from the previous type

<b>Cluster 1: Risky Youth</b>						
X <sup>2</sup> (1,2)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	Decision
1605,174734	16	23.542	26.30	32.00	39.25	Reject Ho
X <sup>2</sup> (2,3)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
63,34276778	16	23.542	26.30	32.00	39.25	Reject Ho
<b>Cluster 2: Family Projects</b>						
X <sup>2</sup> (1,2)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
8910,63843	16	23.542	26.30	32.00	39.25	Reject Ho
X <sup>2</sup> (2,3)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
1106,737302	16	23.542	26.30	32.00	39.25	Reject Ho
X <sup>2</sup> (3,4)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
410,1829332	16	23.542	26.30	32.00	39.25	Reject Ho
X <sup>2</sup> (4,5)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
126,0003842	16	23.542	26.30	32.00	39.25	Reject Ho
<b>Cluster 3: Mature Milk Cows</b>						
X <sup>2</sup> (1,2)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
886,4137796	16	23.542	26.30	32.00	39.25	Reject Ho
<b>Cluster 4: Potential Jack Pots</b>						
X <sup>2</sup> (1,2)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
1683,906252	16	23.542	26.30	32.00	39.25	Reject Ho
X <sup>2</sup> (2,3)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
675,4308611	16	23.542	26.30	32.00	39.25	Reject Ho
X <sup>2</sup> (3,4)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
276,8698708	16	23.542	26.30	32.00	39.25	Reject Ho
X <sup>2</sup> (4,5)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
116,0349853	16	23.542	26.30	32.00	39.25	Reject Ho

### Section 3:

#### Company A: Testing Stationarity Condition- Markov Chain Process

Condition 2: Product Purchase decision is homogeneous across different time periods

	CLUSTER 1		CLUSTER 2				CL. 3	CLUSTER 4			
	P(1-2)	P(2-3)	P(1-2)	P(2-3)	P(3-4)	P(4-5)	P(1-2)	P(1,2)	P(2-3)	P(3-4)	P(4-5)
X <sup>2</sup>	46,87	86,11	32,1	38,18	27,75	28,6	441	34,39	37,01	31,51	29,19
0,1	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject
0,05	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject	Reject
0,01	Reject	Reject	Reject	Reject	Accept	Accept	Reject	Reject	Reject	Accept	Accept
0,001	Reject	Reject	Accept	Accept	Accept	Accept	Reject	Accept	Accept	Accept	Accept

### Section 4:

#### Company A: Results of Logistic Regression for the Training, Validation and Test samples. Cluster 1: Risky Youth

	Training	Validation	Test
Akaike's Information Criterion	5494,89	5494,89	5494,89
Average squared error	0.1797	0.1826	0.1885
Average Error Function	0.5445	0.5510	0.5662
Degrees of freedom	4960	4960	4960
Model degrees of freedom	30	30	30
Total degrees of freedom	4690	4690	4690
divisor for ASE	9980	4990	4988
Error Function	2434.89	2749.83	2824
Final Prediction Error	0.1819	0.1819	0.1819
Maximum Absolute Error	0.9936	0.9905	0.9883
Mean Square Error	0.1808	0.1826	0.1885
Frequencies	4990	2595	2495
Number of Estimate weights	30	30	30
Root average sum of squares	0.4239	0.4272	0.4341
Root Final Prediction Error	0.4265	0.4265	0.4265
Root Mean squared error	0.4252	0.4274	0.4341
Schwarz's Bayesian criterion	5690.34	5690.34	5690.34
Sum of squared errors	1793.70	911.63	940.38
Misclassification Rate	0.2120	0.2132	0.2121

## Section 5:

### Company A: Results of Logistic Regression for the Training, Validation and Test samples. Cluster 2: Family Projects

	Training	Validation	Test
Akaike's Information Criterion	30293.6	30293.6	30293.6
Average squared error	0.1928	0.1961	0.1940
Average Error Function	0.568	0.577	0.577
Degrees of freedom	26607	26607	26607
Model degrees of freedom	20	20	20
Total degrees of freedom	26627	26627	26627
divisor for ASE	53254	26628	26626
Error Function	16253.62	15344.93	15197.8
Final Prediction Error	0.1931	0.1931	0.1931
Maximum Absolute Error	0.9763	0.9772	0.9772
Mean Square Error	0.1930	0.19.61	0.1940
Frequencies	16627	13314	13313
Number of Estimate weights	20	20	20
Root average sum of squares	0.4391	0.4428	0.4405
Root Final Prediction Error	0.4394	0.4394	0.4394
Root Mean squared error	0.4393	0.4428	0.4405
Schwarz's Bayesian criterion	30457.42	30457.42	30457.42
sum of squared errors	53270.71	5222.67	5167.89
Misclassification Rate	0.2963	0.3013	0.2971

**Section 6:****Company A: Results of Logistic Regression for the Training, Validation and Test samples. Cluster 3: Mature Milk Cows**

	Training	Validation	Test
Akaike's Information Criterion	2854.48	2854.48	2854.48
Average squared error	0.1448	0.1488	0.1480
Average Error Function	0.4540	0.4614	0.4580
Degrees of freedom	3108	3108	3108
Model degrees of freedom	11	11	11
Total degrees of freedom	3139	3119	3119
divisor for ASE	6238	3120	3118
Error Function	2832.48	1439.68	1428.06
Final Prediction Error	0.1458	0.1458	0.1458
Maximum Absolute Error	0.9730	0.9554	0.9608
Mean Square Error	0.1453	0.1488	0.1480
Frequencies	3119	1560	1559
Number of Estimate weights	11	11	11
Root average sum of squares	0.3806	0.3857	0.3847
Root Final Prediction Error	0.3819	0.3819	0.3819
Root Mean squared error	0.3812	0.3857	0.3847
Schwarz's Bayesian criterion	2920.97	2920.97	2920.97
sum of squared errors	6238	3120	3118
Misclassification Rate	0.1994	0.2115	0.2078

**Section 7:****Company A: Results of Logistic Regression for the Training, Validation and Test samples. Cluster 4: Potential Jack Pots**

	Training	Validation	Test
Akaike's Information Criterion	13077,17	13077,17	13077,17
Average squared error	0.191	0.191	0.196
Average Error Function	0.5644	0.5644	0.5744
Degrees of freedom	11557	11557	11557
Model degrees of freedom	10	10	10
Total degrees of freedom	11567	11567	11567
divisor for ASE	23134	11566	11566
Error Function	13057	6528.01	6643.55
Final Prediction Error	0.1918	0.1918	0.1918
Maximum Absolute Error	0.9533	0.9391	0.9299
Mean Square Error	0.1916	0.1919	0.1960
Frequencies	11567	5783	5783
Number of Estimate weights	10	10	10
Root average sum of squares	0.4378	0.4380	0.4427
Root Final Prediction Error	0.4380	0.4380	0.4380
Root Mean squared error	0.4378	0.4380	0.442
Schwarz's Bayesian criterion	13150.73	13150.73	13150.73
sum of squared errors	4430.90	2219.71	2267.50
Misclassification Rate	0.2943	0.2961	0.3065

## Section 8:

### Individual Coefficients Validity Tables: Logistic Regression

<b>Equation 5.1</b>	<b>B</b>	<b>S. Error</b>	<b>Wald</b>	<b>p-value</b>
Financial Institution	-0,61	0,087	49,161052	0,001
Age	-0,45	0,139	10,480824	0,002
Life at company	20,8	0,108	37091,907	0,000
Prod.1 Accidents	16,032	0,139	13302,884	0,000
Prod.1: Home	16,3	0,093	30719,158	0,000
Prod.1: Risk	17,05	0,148	13271,663	0,000
Nickel	-0,56	0,238	5,5363322	0,034
Bronze	-15,98	0,292	2994,9381	0,000
Gold	36,02	0,233	23898,771	0,000

<b>Equation 5.3</b>	<b>B</b>	<b>S. Error</b>	<b>Wald</b>	<b>p-value</b>
Financial Institution	-0,537	0,0932	33,198369	0,001
Direct Channel	0,063	0,0064	96,899414	0,000
Age	-0,97	0,151	41,265734	0,000
Life at company	3,71	0,286	168,27351	0,000
Prod.1: Accidents	1,2	0,314	14,605055	0,020
Prod.1: Savings	1,44	0,35	16,927347	0,020
Prod.1 Home	-0,77	0,32	5,7900391	0,037
Prod.1: Risk	1,43	0,353	16,410532	0,018
Nickel	-1,73	0,14	152,69898	0,000
Bronze	-1,09	0,215	25,702542	0,001
Silver	-1,19	0,305	15,22279	0,020
Gold	0,53	0,177	8,9661336	0,027
Platinum	2,63	0,121	472,43358	0,000

<b>Equation 5.5</b>	<b>B</b>	<b>S. Error</b>	<b>Wald</b>	<b>p-value</b>
Intercept	-5,14	0,379	183,92799	0,000
Financial Institution	0,333	0,104	10,252311	0,020
Direct Channel	0,649	0,105	38,204172	0,010
Starting Age	0,046	0,004	132,25	0,000
Nickel	0,47	0,081	33,668648	0,009
Bronze	-0,82	0,192	18,240017	0,019
Silver	-0,15	0,016	87,890625	0,000
Gold	-0,18	0,012	225	0,000
Platinum	0,96	0,17	31,889273	0,010

<b>Equation 5.7</b>	<b>B</b>	<b>S. Error</b>	<b>Wald</b>	<b>p-value</b>
Starting Age	-0,09	0,013	47,928994	0,008
Direct Channel	0,297	0,065	20,87787	0,013
Age	-0,068	0,016	18,0625	0,017
Silver	-0,489	0,031	248,82518	0,000
Gold	0,253	0,097	6,8029546	0,031
Platinum	0,98	0,09	118,5679	0,000

### Individual Coefficients Validity Tables: Cox Regression

<b>Equation 5.2</b>	B	S. Error	z	p-value
Age	-0,138	0,064	-2,55	0,0054
Prod.1: Risk	0,021	0,011	1,9	0,0287
Financial Institution	-0,064	0,03	-2,1	0,0357
Length of relationship	0,317	0,11	2,69	0,0071
Profitability	0,052	0,0167	3,1	0,0019

<b>Equation 5.4</b>	B	S. Error	z	p-value
Age	-0,005	0,0044	-2,13	0,0320
Length of relationship	0,236	0,0904	2,61	0,0091
Profitability	0,06	0,194	3,09	0,0020

<b>Equation 5.6</b>	B	S. Error	z	p-value
Age	-0,224	0,097	-2,3	0,0214
Starting Age	0,245	0,056	4,37	0,0000
Direct Channel	0,273	0,124	2,21	0,0136

<b>Equation 5.8</b>	B	S. Error	z	p-value
Age	-0,079	0,0187	4,21	0,0000
Starting age	0,084	0,022	3,81	0,0000
Length of relationship	-0,163	0,066	2,46	0,0139
Profitability	0,0436	0,014	2,94	0,0033

## Appendix 4: Quantitative Analysis Company B

### **Section 1:** **Company B: Table of Variables**

Variable	Values
Gender	Male Female
Age	years
Marital Status	Single Married Divorced Widow/er
Channel <sub>(1,2,3,4,5)</sub>	Branches Internationals
Total products	
Life at the firm	years
Product Category <sub>(1,2,3,4,5)</sub>	Mortgage Savings Investment
Account	Mortgage Savings Young Scot.Saver Scot.Bond.2KK Scot.Bond.Extra Cash ISA Share No Trace Scot.Plus TESSA ISA
Age at starting relationship	years
Purchase Date <sub>(1,2,3,4,5)</sub>	Date
Life of product <sub>(1,2,3,4)</sub>	years
Census <sub>(1,2,3,4)</sub>	Repurchase = 1 No repurchase = 0
Balance <sub>(1,2,3,4,5)</sub>	Sterling Pounds
Area	Aberdeen Dundee Edinburgh Fife Glasgow Inverness Perth Dumfries England Rest of Scotland
Professional Activity	Blue Collar Manager Accounting Admin Health Services Civil Servant Legal Hospitality Financial Services Army Manufacturing Housewife Student Unemployed Retired



**Section 2:****Company B: Testing No-Order Zero Condition- Markov Chain Process**

Condition 1: The types of policy acquired are independent from the previous type

<b>Cluster 1: First Nest</b>						
X <sup>2</sup> (1,2)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	Decision
101,329015	28	38.92	41.34	48.28	56.89	Reject Ho
X <sup>2</sup> (2,3)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
72,8700428	28	38.92	41.34	48.28	56.89	Reject Ho
X <sup>2</sup> (3,4)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
87,3988078	28	38.92	41.34	48.28	56.89	Reject Ho
X <sup>2</sup> (4,5)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
64,840647	28	38.92	41.34	48.28	56.89	Reject Ho
<b>Cluster 2: Young Savers</b>						
X <sup>2</sup> (1,2)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
112,396874	28	38.92	41.34	48.28	56.89	Reject Ho
X <sup>2</sup> (2,3)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
159,977431	28	38.92	41.34	48.28	56.89	Reject Ho
<b>Cluster 3: Heavy Investors</b>						
X <sup>2</sup> (1,2)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	Decision
68,6548123	16	23.54	26.30	32	39.25	Reject Ho
X <sup>2</sup> (2,3)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
170,781473	10	15.99	18.31	23.21	29.59	Reject Ho
X <sup>2</sup> (3,4)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
154,747898	6	38.92	41.34	48.28	56.89	Reject Ho
X <sup>2</sup> (4,5)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
14,335151	4	7.78	9.49	13.28	18.47	Reject Ho
<b>Cluster 4: Future Planners</b>						
X <sup>2</sup> (1,2)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
120,767885	16	23.542	26.30	32.00	39.25	Reject Ho
X <sup>2</sup> (2,3)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
35,8995589	10	15.99	18.31	23.21	29.59	Reject Ho
X <sup>2</sup> (3,4)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
20,0966889	4	7.78	9.49	13.28	18.47	Reject Ho
X <sup>2</sup> (4,5)	DF	X <sup>2</sup> (0.1)	X <sup>2</sup> (0.05)	X <sup>2</sup> (0.01)	X <sup>2</sup> (0.001)	
26,852549	4	7.78	9.49	13.28	18.47	Reject Ho

### Section 3:

#### Company B: Testing Stationarity Condition- Markov Chain Process

Condition 2: Product Purchase decision is homogeneous across different time periods

	CLUSTER 1				CLUSTER 2			
	P(1-2)	P(2-3)	P(3-4)	P(4-5)	P(1-2)	P(2-3)	P(3-4)	P(4-5)
X <sup>2</sup>	45	78,7	75,1	127,5	326,3	524	74,4	51,26
0,1	Rej	Rej	Rej	Rej	Rej	Rej	Rej	Rej
0,05	Rej	Rej	Rej	Rej	Rej	Rej	Rej	Rej
0,01	Acc	Rej	Rej	Rej	Rej	Rej	Rej	Rej
0,001	Acc	Rej	Rej	Rej	Rej	Rej	Rej	Acc
	CLUSTER 3				CLUSTER 4			
	P(1-2)	P(2-3)	P(3-4)	P(4-5)	P(1-2)	P(2-3)	P(3-4)	P(4-5)
X <sup>2</sup>	69,8	64,8	44,8	63,13	183,9	77	3657	62,25
0,1	Rej	Rej	Rej	Rej	Rej	Rej	Rej	Rej
0,05	Rej	Rej	Rej	Rej	Rej	Rej	Rej	Rej
0,01	Rej	Rej	Acc	Rej	Rej	Rej	Rej	Rej
0,001	Rej	Rej	Acc	Rej	Rej	Rej	Rej	Rej

### Section 4:

#### Company B: Results of Logistic Regression for the Training, Validation and Test samples. Cluster 1: First Nest

	Training	Validation	Test
Akaike's Information Criterion	3862.23	3862.23	3862.23
Average squared error	0.2449	0.2475	0.2445
Average Error Function	0.6819	0.6878	0.6815
Degrees of freedom	2802	2802	2802
Model degrees of freedom	12	12	12
Total degrees of freedom	2814	2814	2814
divisor for ASE	5628	4220	4220
Error Function	2838.23	2902.71	2875.98
Final Prediction Error	0.247	0.247	0.247
Maximum Absolute Error	0.8088	0.8206	0.8206
Mean Square Error	0.2459	0.2475	0.2445
Frequencies	2814	2110	2110
Number of Estimate weights	12	12	12
Root average sum of squares	0.4949	0.4975	0.4945
Root Final Prediction Error	0.4979	0.4979	0.4979
Root Mean squared error	0.4949	0.4975	0.4945
Schwarz's Bayesian Criterion	3933.53	3933.53	3933.53
sum of squared errors	1078.42	1044.85	1032.18
Misclassification Rate	0.3692	0.3725	0.3663

## Section 5:

### Company B: Results of Logistic Regression for the Training, Validation and Test samples. Cluster 2: Young Savers

	Training	Validation	Test
Akaike's Information Criterion	604.08	604.08	604.08
Average squared error	0.1441	0.1522	0.1796
Average Error Function	0.4626	0.4802	0.1796
Degrees of freedom	637	637	637
Model degree of freedom	5	5	5
Total degrees of freedom	642	642	642
divisor for ASE	1284	964	964
Error Function	594.08	462.95	554.59
Final Prediction Error	0.1464	0.1464	0.1464
Maximum Absolute Error	0.9094	0.8827	0.899
Mean Square Error	0.1453	0.1522	0.1596
Frequencies	642	482	482
Number of Estimate weights	5	5	5
Root average sum of squares	0.3796	0.3801	0.3948
Root Final Prediction Error	0.3826	0.3826	0.3826
Root Mean squared error	0.3811	0.3981	0.3938
Schwarz's Bayesian criterion	626.40	3933.53	3933.53
sum of squared errors	185.11	146.75	173.16
Misclassification Rate	0.1791	0.186	0.2282

**Section 6:****Company B: Results of Logistic Regression for the Training, Validation and Test samples. Cluster 3: Heavy Investors**

	Training	Validation	Test
Akaike's Information Criterion	4139.69	4139.69	4139.69
Average squared error	0.1976	0.1977	0.2001
Average Error Function	0.4848	0.4849	0.4902
Degrees of freedom	3520	3520	3520
Model degree of freedom	7	7	7
Total degrees of freedom	3527	3527	3527
divisor for ASE	7024	5290	5290
Error Function	3125.69	3094.29	3131.69
Final Prediction Error	0.1980	0.1980	0.1980
Maximum Absolute Error	0.8776	0.8754	0.8754
Mean Square Error	0.1980	0.1976	0.2001
Frequencies	3527	2645	2645
Number of Estimate weights	7	7	7
Root average sum of squares	0.4445	0.4445	0.4485
Root Final Prediction Error	0.4454	0.4454	0.4454
Root Mean squared error	0.4450	0.4445	0.4483
Schwarz's Bayesian criterion	4182.86	4182.86	4182.86
sum of squared errors	1394.33	1395.44	1393.36
Misclassification Rate	0.2658	0.2635	0.2722

**Section 7:****Company B: Results of Logistic Regression for the Training, Validation and Test samples. Cluster 4: Future Planners**

	Training	Validation	Test
Akaike's Information Criterion	1817.64	1817.64	1817.64
Average squared error	0.2077	0.2064	0.1991
Average Error Function	0.6021	0.5954	0.5901
Degrees of freedom	1496	1496	1496
Model degrees of freedom	5	5	5
Total degrees of freedom	1501	1501	1501
divisor for ASE	3002	2252	2250
Error Function	1807.64	1804.98	1805.44
Final Prediction Error	0.2091	0.2091	0.2091
Maximum Absolute Error	0.8877	0.8939	0.8823
Mean Square Error	0.2083	0.2042	0.2081
Frequencies	1501	1126	1125
Number of Estimate weights	5	5	5
Root average sum of squares	0.455	0.4519	0.4498
Root Final Prediction Error	0.4572	0.4572	0.4572
Root Mean squared error	0.4665	0.4619	0.4551
Schwarz's Bayesian criterion	1844.21	1844.21	1844.21
sum of squared errors	623.57	660.08	665.84
Misclassification Rate	0.3101	0.3008	0.3007

Section 8:

Individual Coefficients Validity Tables: Logistic Regression

<b>Equation 7.1</b>	B	S. Error	Wald	p-value
Intercept	0,61	0,071	73,814719	0,001
Length of relationship	0,051	0,019	7,2049861	0,025
Prod.1: Savings	-10,3	0,108	9095,5075	0,000
Prod.1: Investment	-10,001	0,14	5103,0613	0,000
Prod.1: Mortgage	0,96	0,121	62,94652	0,001

<b>Equation 7.3</b>	B	S. Error	Wald	p-value
Length of relationship	0,08	0,012	44,444444	0,002
Prod.1:Savings	3,34	0,318	110,31605	0,000
Prod.1: Investment	2,89	0,401	51,940597	0,001
Prod.1: Insurance	-0,82	0,136	36,353806	0,002

<b>Equation 7.5</b>	B	S. Error	Wald	p-value
Intercept	1,26	0,342	13,573407	0,024
Length of relationship	-1,28	0,201	40,553452	0,002
Prod.1: Investment	0,22	0,073	9,0823794	0,034
Prod.1: Insurance	0,075	0,012	39,0625	0,002
Prod.1: Mortgage	-0,14	0,019	54,293629	0,001
Life 1st product	-0,11	0,047	5,4775917	0,042

<b>Equation 7.7</b>	B	S. Error	Wald	p-value
Length of relationship	-0,132	0,021	39,510204	0,002
Prod.1: Investment	0,86	0,26	10,940828	0,021
Prod.1: Mortgage	0,44	0,131	11,281394	0,021
Prod.1: Insurance	-1,31	0,193	46,071035	0,002
Starting Age	-0,02	0,007	8,1632653	0,023

Individual Coefficients Validity Tables: Cox Regression

<b>Equation 7.2</b>	B	S. Error	z	p-value
Life first product	-0,0055	0,0025	-2,15	0,0316
Length of relationship	0,0521	0,0193	2,69	0,0071

<b>Equation 7.4</b>	B	S. Error	z	p-value
Length of relationship	0,0089	0,0029	3,01	0,0026

<b>Equation 7.6</b>	B	S. Error	z	p-value
Prod.1: Investment	0,107	0,0527	2,03	0,042
Life first product	-0,002	0,0006	3,19	0,0014

<b>Equation 7.8</b>	B	S. Error	z	p-value
Prod.1: Investment	0,0421	0,0159	2,63	0,0316
Life first product	-0,072	0,0226	-3,18	0,0015
Length of relationship	-0,049	0,0016	-2,98	0,0029
Starting age	-0,017	0,0052	-3,22	0,0014

