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# Towards Re-conceptualising and Measuring Brand Identity in Services: A Consumer Perspective

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# DECLARATION

This is to certify that that the work contained within has been composed by me and is entirely my own work. No part of this thesis has been submitted for any other degree or professional qualification.

(Vandana Pareek)

# ABSTRACT


This thesis focuses on conceptualizing and measuring brand identity in services. The lack of a wider-accepted measure of brand identity is surprising given that it a) provides meaning to the brand, makes it unique and communicates what the brand stands for (Rosengren et al., 2010), and b) is the driver of one of the four principal dimensions of brand equity, namely, brand association (Keller, 1993).

Despite its acknowledged importance, brand identity measurement has received remarkably little attention, and efforts to develop a valid and comprehensive measure have been limited. While prior work on brand identity has proposed some conceptual models highlighting different facets that contribute to brand identity development, the majority of these models have not been subjected to empirical testing. This raises concerns over their robustness and validity. More importantly, the applicability of these models to a service context is not clear. For instance, the role of consumers, who participate in the service production process and interact frequently with the service providers, is hardly considered in the prior frameworks.

In summary, the dearth of research studies accounting for the consumer perspective of brand identity, along with the lack of a valid and comprehensive scale to measure service brand identity, motivated this research. This thesis thus aims to, first, review and refine the concept of brand identity to account for the consumer perspective of this construct and then develop a multidimensional scale to measure service brand identity and identify its key dimensions.

To fulfill the research aims, Churchill's (1979) paradigm was followed in conjunction with DeVellis (2003) and other scale development studies (Brakus et al., 2009; Lundstorm & Lamont, 1976). This thesis employed both qualitative and quantitative research methods to achieve the research aims. Qualitative research was undertaken to gain additional insights into the construct (e.g. consumer perspective) and to generate and purify the initial scale items. Quantitative methods were then adopted to validate and establish the final scale.

Guided by the aforementioned research design, this thesis developed a service brand identity (SBI) scale consisting of five dimensions labelled: *process identity*, *organization identity*, *servicescape identity*, *symbolic identity* and *communication identity*. The analysis confirms that the scale is reliable, valid, and parsimonious. Further, the scale application is demonstrated by assessing and empirically establishing the association between service brand identity and brand trust and loyalty. The results support the proposition that the consumer perspective is important in understanding and developing brand identity in a service context. Relatedly, it is also shown that service elements, such as the servicescape and service process, play a key role in developing a strong brand identity for services.

The key contribution of this study is the development of a psychometrically valid and reliable scale. This research extends the literature on brand identity (Upshaw, 1995; Aaker, 1996; De Chernatony, 1999; Kapferer, 2000; Burmann et al., 2009; da Silveira et al., 2013) to include the service domain which has to date not received much research attention in branding. It proposes and empirically establishes two new dimensions of service brand identity (Process Identity and Servicescape Identity) which have not been highlighted in extant brand identity literature. In addition to this, this thesis provides a much-needed consumer perspective on brand identity and its components, thereby responding to calls for more research on marketing constructs to account for the consumer perspective (Rust, 1988; Payne et al., 2009; Arnould et al., 2006). In this regard, this study is among the first to empirically link consumer-based variables to a specific brand identity scale.

*To mummy and papa,*

*For your unconditional love and support,*

*Silent prayers for my success, and*

*Innumerable sacrifices to see me where I am.*

*I sincerely dedicate this thesis to you*

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*“Silent gratitude isn't much use to anyone”* G. B. Stern

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# LIST OF ABBREVIATIONS

| | |
|---|---|
| **SBI** | **Service Brand Identity** |
| **BI** | **Brand Identity** |
| **MM** | **Mixed Method** |
| **SDP** | **Scale Development Process** |
| **EFA** | **Exploratory Factor Analysis** |
| **CFA** | **Confirmatory Factor Analysis** |
| **PI** | **Process Identity** |
| **SI** | **Servicescape Identity** |
| **OI** | **Organization Identity** |
| **CI** | **Communication Identity** |
| **SyI** | **Symbolic Identity** |

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# CHAPTER 1 INTRODUCTION TO THE THESIS

The aim of this research is to develop a valid and reliable scale to measure Service Brand Identity (SBI). The lack of a broad-based measure of brand identity is surprising given that brand identity a) provides meaning to the brand, makes it unique and communicates what the brand stands for (Rosengren et al., 2010), and b) is the driver of one of the four principal dimensions of brand equity, namely, brand association (Keller, 1993). Although the concept of brand identity has attracted significant attention among marketing scholars who have proposed various models and frameworks to explain this phenomenon (Aaker, 1996; Kapferer, 2000), various shortcomings need to be addressed. For example, there is a lack of brand identity studies in the context of services; brand identity conceptualisations do not adequately capture the perceptions of the most important stakeholder group: customers; and lastly, most of the brand identity dimensions have not been empirically tested and established, for services as well as products. The SBI scale addresses these issues and hence enriches the empirical literature on brand identity.

The aim of this chapter is to introduce the readers to this research and to provide an outline of the subsequent chapters. First, a brief background to the research is provided. The research gaps and objectives are discussed next. The penultimate section provides justification for conducting this research, followed by a brief section on research methodology. Lastly, a brief outline of the thesis is provided.

## 1.1 Research Background

In the past twenty years, services have become increasingly commercially important, which stresses the significant role research can play in understanding service brands and their underlying meaning for consumers (O'Cass & Grace, 2003). Researchers have suggested the importance of service brands by stating that it is much more than a mere word, symbol, or name - it is rather a holistic process that begins with the relationship between the firm and its staff and comes to fruition during customer-staff interaction (Riley & De Chernatony, 2000, p.138). The importance of brands in services is also highlighted by Dobree & Page (1993) who state that consumers' expectations of service quality and promise tend to be vague without a brand. In view of the importance of services branding, it is vital to consider the means to create successful service brands (Dibb & Simkin, 1993).

Aaker (1996) suggests that a key to building brands successfully is to be aware of how to develop a brand identity, i.e. to know what the brand stands for. Brand identity plays a significant role in effectively managing brands and distinguishing them from competitors (da Silveira et al., 2013; Nandan, 2005). It represents the values that a brand aspires to stand for, and is, therefore, a cornerstone in the process of creating and maintaining a relationship with those customers attracted to the values (Alsem & Kostelijk, 2008).

The concept of brand identity has garnered increased academic attention since the early 1990's (Coleman et al., 2011). Since then, many researchers have developed models and theoretical frameworks that can serve as a means to create and develop a strong brand identity. Basically, there are over six different brand identity models proposed by various researchers (e.g. Upshaw, 1995; Aaker, 1996; Kapferer, 2000; De Chernatony, 1999; Ghodeshwar, 2008; Burmann et al., 2009). These models have a prominent place in the brand identity literature, since they not only guide new researchers and managers, but also highlight the importance of having a strong brand identity. For example, brand identity is central to the brand's strategic vision (De Chernatony, 1999). Further, researchers suggest that developing a strong brand identity is critical because it is an essential prerequisite for effective brand management (Kapferer, 2000, p.90) and it has significant effect on brand loyalty via its effect on perceived value, customer satisfaction, and brand trust (He et al., 2012). However, despite its acknowledged importance, brand identity research has received much less attention to date. A review of the literature (Chapter 2) highlights a number of research gaps that warrant attention. The next section provides a detailed account of the research gaps that this thesis aims to address.

## 1.2 Research Gaps

As explained above, the existing brand identity literature has been informed by a number of conceptual models that have provided a base for understanding this concept. However, a review of extant literature shows that, although efforts have been made towards the conceptualisation of brand identity, the results have been mainly descriptive (see for example Upshaw, 1995; Aaker, 1996; Kapferer, 2000; De Chernatony 1999; Burmann et al., 2009) and lack robust empirical evidence.

In other words, the majority of the existing brand identity models have not been subjected to empirical testing (Coleman et al., 2011). This is particularly unfortunate as this raises concerns regarding robustness, validity and applicability of these models in different contexts and also in understanding the key dimensions of brand identity.

The current state of knowledge on the measurement of brand identity is particularly lacking and still remains an area that needs more research. Clearly, there is a lack of instruments (e.g. a scale, index etc) that can help in measuring brand identity. In order to build a strong, unique and enduring brand identity, service firms need to be able to measure it and understand whether and to what extent brand identity affects other important customer outcome variables like brand loyalty, customer satisfaction, customer attitude etc.

Moreover, the brand identity literature has not been sensitive towards the services context, particularly the BI models (e.g. physique (Kapferer, 2000)). The applicability of these models to different contexts like goods and services is not clear. Considering that it is now generally acknowledged that services marketing is different from product marketing and hence deserves separate treatment (Edgett & Parkinson, 1993; Shostack, 1977), if not full, at least part of these models might not be applicable to the services context. It is also possible that some of the dimensions might be more significant for service brand identity than for goods and vice versa. Therefore, research needs to consider the challenges that the specific service characteristics can bring for service marketers in developing a strong brand identity and whether there is a need to adapt current brand identity conceptualisation to better suit service brands.

Lastly and importantly, the extant research has predominantly focused on viewing brand identity as a managerial construct, failing to account for the most important stakeholder: the customer. With the exception of Upshaw's (1995) definition, most definitions of BI view brand identity in terms of how the firm wants the brand to be perceived by consumers. Recent research has criticized this approach and called for a re-conceptualization of BI to recognize consumers as contributors to the conceptualisation and development of brand identity (Da Silveira, et al., 2013; Csaba & Bengtsson, 2006). There have also been calls for research from Gummeson (1995) and Rust (1988) for research that better specifies marketing constructs by taking into account consumers' perspectives. This need is more pressing in the services context since "a service provider without customers cannot produce anything" (Gummeson 1998, p.247). This is also consistent with the Service-Dominant (S-D) Logic (Vargo & Lusch, 2004) that regards the customer as "a co-producer of value". An implication of not considering consumer perspective of could be that the relevance of BI models for managers might be limited. This is because it is not known whether consumers value and understand these models and their underlying dimensions clearly. These models, thus, potentially show an incomplete picture of creation, development and establishment of brand identity. Within this perspective, research is needed to take into account consumer perspective as well to arrive at a holistic understanding of brand identity.

To summarise, the dearth of empirical studies considering consumer perspective of brand identity, along with the lack of available scale to measure brand identity has prompted this study. The review of the literature indicates that research in this area, especially with regard to measuring brand identity, is limited in several respects and that developing a measure of this construct can help in mitigating several of these limitations. Consequently, this research aims to achieve the following research objectives:

## 1.3 Research Objectives

This research aims to provide insight into the development and measurement of service brand identity by developing a scale to measure it. The scale will serve three purposes, a) it will help in measuring brand identity, b) it will highlight and empirically establish the key and relevant dimensions, and c) it will facilitate the examination of the association between brand identity (as a whole and as separate dimensions) and brand trust and loyalty.

Thus, the overarching aim of this research is to develop a valid and reliable scale to measure service brand identity. This overall objective will be achieved through the following sub-objectives:

- To critique the current literature on brand identity to define the domain of construct
- To conceptualize service brand identity by incorporating a consumer perspective in the development of service brand identity

- To determine key dimensions that constitutes service brand identity
- To apply the scale to explore the relationship between brand identity and brand trust and loyalty

Thus, considering the overall importance of the concept of brand identity and the above stated objectives of this study, this research aims to provide important insights that can prove to be of significant interest to both the academic as well as the practitioner community in the area of services branding.

## 1.4 Research Methodology

In order to achieve the above stated objectives, this study adopted a mixed methods approach that employed both qualitative as well as quantitative methods. Within a mixed-methods approach, the *instrument development approach* was adopted to achieve the overall objective of developing a scale. The scale development procedures were guided primarily by Churchill's (1979) paradigm and DeVellis's (2003) suggestions. As shown in Figure 1, the scale development process consists of seven stages.

The first stage involved 'defining the domain of construct', wherein a preliminary definition of the construct ('service brand identity') and its dimensions were proposed. To identify the dimensions of the construct, pertinent work in brand identity literature was reviewed.

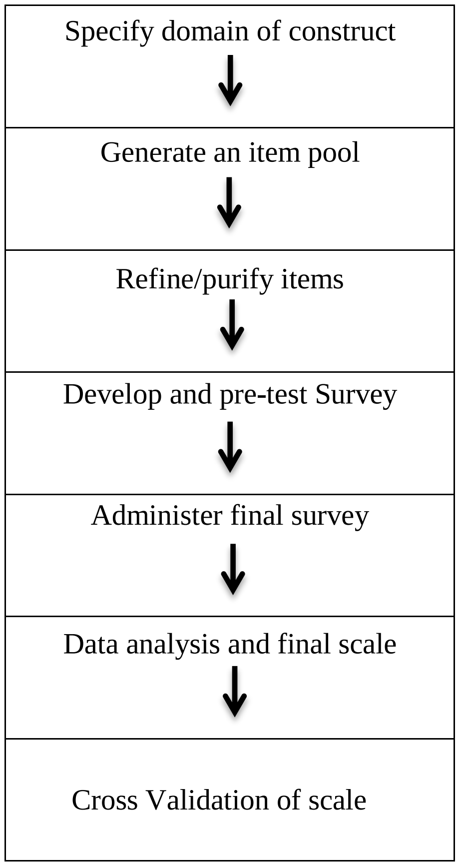


**Figure 1: Scale Development Procedure Followed by this Research**

In addition to this, in order to explore consumer perspective of brand identity and their opinion of the factors that can contribute to the development of service brand identity, in-depth qualitative interviews were conducted. The results generated additional dimensions of brand identity particularly relevant for service brands. These results from the interviews were combined with the literature-generated dimensions to obtain a total of eight hypothesized dimensions of service brand identity.

The second stage related to ‘generating an item pool’ for each of the eight dimensions; these items were meant to effectively capture their corresponding dimension. The items were generated from the existing literature and supplemented using the insights generated from in-depth qualitative interviews conducted with consumers.

The third stage involved refining or purifying the item pool, generated in the previous stage, to enhance content and face validity of the items (DeVellis, 2003). This was achieved through a three-step purification method. In steps one and two, the scale items were subjected to review by two independent marketing academic experts and in step three, an expert panel review was conducted with academic as well as managerial experts

In the fourth stage, the reviewed/purified items were pre-tested on a convenience sample of 106 respondents. This was achieved via an online survey in which the reviewed items were put in in the form of a questionnaire and respondents were asked to rate each item using a 7-point Likert scale.

In the fifth and sixth stages, items were administered to a wider sample (n=500) of UK consumers through an online survey. Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were conducted to develop and confirm the final scale respectively.

In the last stage, the scale was cross-validated i.e. its convergent, discriminant and nomological validity and reliability was established using procedures described in the extant scaling literature (Hair et al., 2006; Furr, 2011; Walsh & Beatty, 2007). The scale development process is discussed in more detail in Chapter 3 of this thesis.

## 1.5 Thesis Structure

This thesis is divided into six chapters:

Chapter 1 has provided a broad overview of this research, the rationale for the research and the methodology adopted to achieve the research objective.

Chapter 2 provides a detailed review of the research literature. It begins by reviewing the importance of services and service branding in general. Then, it discusses the importance of brand identity in the branding literature and its importance in a service context. Further, it highlights the need for studying brand identity for service brands. The chapter then moves on to provide an in-depth account of current brand identity literature which then is followed by a critical evaluation. The chapter provides a deeper understanding of the strengths and weaknesses of the current literature and how the shortcomings can be overcome through research. It concludes by highlighting the main research gaps this research aims to address.

Chapter 3 details the methodology of the study. It addresses research design issues and key decisions taken to support this research. Further this chapter provides a detailed discussion on each stage of the scale development process undertaken by this research. The chapter concludes with discussion and justification of the data analysis methods employed by this research.

Chapter 4 describes results from the preliminary research conducted to generate and refine scale items. This chapter covers three main areas. First, it provides analysis of interview transcripts conducted in an effort to gain a consumer perspective on service brand identity. In the absence of a suitable body of literature to guide the research regarding the consumer perspective of brand identity, it was considered appropriate to conduct exploratory research in the form of qualitative interviews. Second, it provides a detailed account of the procedures undertaken to conduct an expert panel review as part of the scale item refining. Thirdly, it provides results obtained from survey pre-testing from a sample of 106 respondents.

Chapter 5 presents findings from the analysis of data obtained from the final sample of 500 UK consumers. The chapter reports on data preparation and assessment followed by a descriptive report on how and why exploratory factor analysis and confirmatory analysis was conducted to obtain the final scale. Further, this chapter details the scale validation process and finally presents the final scale.

Chapter 6 provides a summary of the key findings of the research and discusses the contributions this thesis makes to advance knowledge in the field. The chapter also discusses the limitations of this research and what future research can be undertaken to overcome these limitations.

# CHAPTER 2 LITERATURE REVIEW

## 2.1 Chapter Introduction

This research is set within the context of services, hence it is important to understand key characteristics of services and their implications not only for the marketing of services but for the development of services brand identity in particular. This chapter, thus, discusses the general importance and meaning of services, the reason for the growing research in this field, the points of difference between services and goods and their implications from a marketing point of view, and the challenges of marketing services. The discussion then highlights how service branding can assist marketers in addressing these challenges. Thus, the main aim of this section is to lay a foundation over which the theoretical stance of this thesis is based.

Based on this foundation, this chapter next presents the importance of brand identity (BI) in building strong service brands. This is followed by an in-depth discussion and critical evaluation of current research on brand identity. In doing so, this chapter explains the concept of BI, underlines its importance in the literature and sets out the theoretical and conceptual frameworks underpinning this study. The objective of this chapter is to provide a synthesis from extant literature of what has and what has not been learned before about brand identity, thereby identifying knowledge gaps that need further research attention.

This chapter is outlined as follows: Section 2.2 provides a general discussion on service branding and highlights its importance. This section also introduces the concept of brand identity and discusses what makes brand identity important for services. Section 2.3 provides an in-depth discussion of the concept of brand identity, its definition, importance, conceptual frameworks, its consequences and related concepts. The main aim of this section is to critically discuss and highlight the research gaps in brand identity literature. Section 2.4 concludes this chapter.

## 2.2 Research Background: Services and Service Branding

### 2.2.1 Services

The global economy is characterized by a steady and increasing share of services (Rahman & Areni, 2009; Gathungu, 2010). This can be attributed to the dominance of the service sector in the economy of western countries such as the USA, Western Europe, Japan and Australia, where consumers spend more on services than on goods (King & Grace, 2006; Asif & Sargeant, 2000). Services contribute more than 70 per cent to the GDP and employment in these countries (World Bank data, 2014; King & Grace, 2006) and this sector is gaining share even in emerging economies' GDP (Lovelock & Wirtz, 2011). This rapid growth of the service sector is mainly driven by forces such as government policies, social changes, business trends, advances in information technology and globalization (Lovelock & Wirtz 2011, p.32)

Among other things, the rapid growth of the service sector has motivated researchers to embark on developing effective marketing strategies for services

(Hartman & Lindgreen, 1993). Due to the growing importance and relevance of services, research in services marketing and branding has also gained increasing academic attention (Ostrom et al., 2010).

### 2.2.2 Service Branding

In the current competitive environment, formation and development of service brands can be a source of sustainable competitive advantage (McDonald et al., 2001). In this regards, Berry (2000, p.128) suggests that “branding is not just for tangible goods; it is a principal success driver for services organizations as well.” With an explosion in the number of new service brands entering markets every day and the increasing competition between firms to attract consumers, building strong brands has become extremely vital (Kohli et al., 2005). In such a scenario, research can play a significant role in understanding service brands and their underlying meaning for consumers (O’Cass & Grace, 2003). The issue of service branding thus carries important implications for academics in advancing knowledge in this field as well as for practitioners to build a strong service brand.

In principle, the concept of a service brand is often conceptualized as being integrative where “service” is considered to be super-ordinate to the branding of “goods” and/or “services” (Brodie et al., 2009). On a similar note, Riley and De Chernatony (2000, p.138) suggest that “the service brand is a holistic process beginning with the relationship between the firm and its staff and coming alive during the interaction between staff and customers.” Traditionally, researchers have defined a brand as “a distinguishing name and/or symbol intended to identify the goods or services of either one seller or a group of sellers, and to differentiate those goods or services from those of competitors" (Aaker, 1991, p.7). However, service branding researchers have considered service brand as a process rather than just a name, symbol, or logo used to differentiate products as mentioned in Aaker's (1991) definition.

The significance of service brands is stressed by Dobree & Page (1993) who state that without a brand, consumers' expectations of service quality and promise tend to be vague. Berry (2000) and De Chernatony & Segal-Horn (2003) highlighted the importance of branding in services by presenting a separate branding model for services to show how service brands have an impact on various factors such as customer satisfaction and customer trials. Berry (2000) stressed the significant role of the customer's service experience in brand formation and concluded that the '*presented brand*' assists in strengthening the brand by generating greater brand awareness, stimulating new customer trial and reinforcing brand meaning with existing customers. De Chernatony & Segal-Horn (2003) demonstrated how successful development of service brands starts with the corporate culture and organizational staff understanding their role, which in addition to highly co-ordinated service delivery systems and organisational processes helps in reinforcing a holistic brand identity.

While developing a service brand may be critical for the aforementioned reasons, it can be argued that existing literature on product brands can be extended to service brands. This is because, service brands are considered to be unique and hence different from product brands. This argument stems from the fact that services possess unique characteristics like intangibility, inseparability, heterogeneity and perishability (Zeithaml et al., 1985) that have implications for service marketing (e.g. Zeithaml et al, 1985; Bateson, 1995; Turley & Moore, 1995; De Chernatony & Dall'Olmo Riley, 1999; King & Grace, 2006). For example, due to the intangible nature of services, brand name, price, and facility are the only variables available to the consumer for evaluation of a service before it is used (Turley & Moore, 1995). This means that it is difficult for consumers to evaluate service brands and service quality prior to purchase (De Chernatony & Riley, 1999). Inseparability results in consumer involvement in services that makes recruiting staff whose values align with the brand important (De Chernatony & Riley, 1999). Heterogeneity needs service brands to be "customized" to 'serve the needs of particular consumers better' and to regard consumers as co-producers of value (De Chernatony & Riley, 1999, p.182). Due to perishability, services cannot be stored or owned which leads to service brands facing 'the challenge of developing an image and reputation to attract consumers.' (De Chernatony & Riley, 1999, p.183).

Not only this, services are different from goods on various other parameters as widely documented in the marketing literature (Turley & Moore, 1995; George & Berry, 1981). These differences raise several implications for service brands (De Chernatony & Riley, 1999). For example, the differences between goods and services may be attributed to the sequence in which different activities take place, for example, services are first sold, then produced and then consumed, whereas goods are usually first produced, then sold and consumed (Edgett & Parkinson

1993, p.25). Moreover, the core service offering is considered to mainly comprise of processes, people and physical facilities and hence is considered to be more complex and different than the core offering for goods (Tax & Stuart, 1997).

Consistent with this Gronroos (1982, p.30) also suggests that "services do have some basic characteristics which make them fundamentally different from a marketing point of view." Gronroos (1982) highlights that such differences arise from the type of marketing functions involved. The author suggests that in the case of goods marketing, only traditional marketing functions (that involve marketing mix activities) are active whereas in the case of services, in addition to the traditional marketing function, an interactive marketing function is also present which leads to the involvement of consumers in the production and consumption process. Thus, while participating, consumers can be affected by and in turn affect the production and consumption process, unlike in the traditional marketing function where the consumer has more of a passive role.

Recently, Vargo & Lusch (2004) affirmed that there has been a paradigm shift from a goods-dominant view to a Service-Dominant (S-D) view. While under the goods-dominant view customers play a minimal role in the production process, under the S-D view they play an active role with the suppliers/producers by engaging in dialogue and interacting during various stages of the production process. Vargo and Lusch (2004) theorise that consumers play an active role throughout the service process, from product design to consumption. Co-creation focuses on developing a relationship between customers and suppliers where the organization seeks to pro-actively gather information about a specific need of the consumer, working with them throughout the design and production process to develop a solution, and finally delivering the solution. To this end, customers interact and engage in dialogue with different stakeholders, such as interacting with suppliers during product design and production, providing active inputs during delivery and consumption, etc. (Payne et al., 2009; Vargo and Lusch, 2004). In today's time consumers are able to use internet, e-mail and social media to interact with goods and service firms. They are able and willing to provide new ideas, suggestions, and feedback to the companies. This helps companies in identifying needs that have not been met and ideas on improving their existing offerings. Involving consumers in co-creation process helps companies to improve the quality of their products/services, improve their acceptance in market and enhance customer satisfaction (Ernst et al. 2010; Hoyer et al. 2010).

The S-D logic has significant implications for the branding literature as well. First, researchers (Arnould et al., 2006; Payne et al., 2009) observe that within the context of the S-D logic, it is now time to revise the domain of branding by looking at branding issues from the consumer perspective as well. This is important, as the "dominant, goods-centred view of marketing may not only hinder a full appreciation for the role of services but also may partially block a complete understanding of marketing in general" (Vargo & Lusch, 2004, p.2).

Thus, as shown in Figure 2, there are differences at three levels between goods and services – goods vs service characteristics, goods marketing vs. service marketing and goods branding vs. service branding.

Considering these differences, several researchers have advocated a need to adapt traditional marketing and branding strategies for effective marketing of services (Edgett & Parkinson, 1993). Effective marketing of services must, therefore, pay attention to 7 P's of marketing, viz people, place, price, promotion, physical evidence, product and process, instead of traditionally used 4 Ps of marketing.

The extra 3 P's: Process, people and physical evidence are particularly important for services. Effective processes are required for creating and delivering product elements to customers. The overall service process can have an impact on overall customer experience and satisfaction, for example, if the service process is not up-to-date, it can hamper front-line staff's efforts to perform their job, which can result in slow delivery, low productivity and ultimately failure of services (Lovelock et al. 2004).

People providing service (for example serving at a restaurant, bank cashier, beautician, receptionist) to customers can influence customer's perceptions of service quality (Lovelock et al. 2004). Therefore, service firms need to pay special attention to training and motivation of service staff, especially those who will be in direct contact with customers.

Effective marketing of services must also pay attention to the appearance of service settings, for example, interiors, furnishing, lighting, music, as well as staff's appearance, since these cues provide tangible evidence of a quality of a service firm and are often the basic for customers evaluation of a service (Bitner, 1992; Lovelock et al. 2004).

The implications of these differences on service brands were studied by O'Cass & Grace (2004) who suggested that services have distinct branding dimensions that are pertinent when consumers make decisions regarding *service* brands. Their research concluded that, as opposed to product brands, dimensions such as core service, experience with brand, self-image congruency, servicescape, feelings, and interpersonal service, publicity, advertising, and price are the most important brand dimensions for service consumers. The authors further claimed that "the primary issues to the consumer in a service are wholly different from those expected from a product (p.267)."

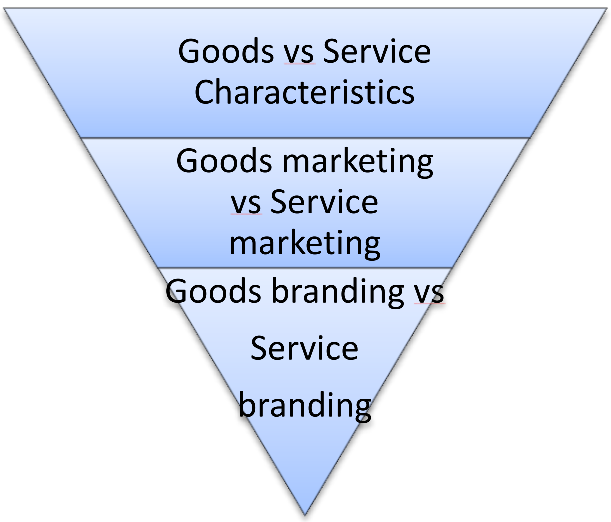


**Figure 2: Levels of Difference between Goods and Services**

Berry (2000) sums up these challenges by stating that in services, consumers do not get to touch, try, scrutinize or test the service prior to the actual use. This creates difficulty for consumers to visualize and understand the invisible purchase. Consequently, service brands can prove to be helpful for both service firms and consumers. Strong brands not only enable organizations to enjoy greater brand loyalty and higher margins due to value generation (Burmann et al., 2009), but also make them less vulnerable to competitive attacks and garner better cooperation from trade and other intermediaries (Gill & Dawra, 2012). For consumers, brands bring along a promise of consistent and good quality (Dobree & Page, 1990, p.19). Brands help consumers get through the clutter of available information (Srivastava, 2011) and add value to the customer (Nandan, 2005). In the same vein, service brands can help organizations in communicating their offering and consumers in understanding what to expect from the offering. Consistent with this, research has suggested that branding can help in increasing consumers' trust towards a service and reduce the uncertainty surrounding perceived monetary or social risk (Simoes & Dibb, 2001; Berry, 2000).

To summarise, the discussion above suggests that service branding is becoming increasingly important for organizations as well as consumers due to the benefits it offers. In view of such importance of service brands, it has become vital to consider the means to create successful service brands (Dibb & Simkin, 1993). In line with this, extant research on services has investigated and, even adapted, diverse aspects of branding such as, the strength of branding and positioning in services (Dibb & Simkin, 1993); effects of service brand communications on brand evaluation (Grace & O'Cass, 2005); consumer based perceptions of brand associations of a service brand (O'Cass & Grace, 2004) and importance of brand cues in intangible service industries (Brady et al., 2005), with various researchers addressing the issue of branding for a particular service sector like, information and internet services (Angus & Oppenheim, 2004), financial services

(O’Loughlin & Szmigin, 2005; Devlin & McKechnie, 2008), and hospitality and hotel industry (Tepeci, 1999; O’Neill & Mattila, 2004).

However, to date, the concept of brand identity has not received much research attention in the context of services. Despite being an important element in the brand building process, research over this area has been minimal. It is the broad intention of this thesis to conceptualize and operationalize the concept of brand identity in services and thereby extend the service branding as well as marketing literature. The next section provides a more detailed discussion and justification for the need for looking at service brand identity. It, thereby, highlights the relevance and importance of brand identity for services and what makes this research topic viable.

### 2.2.3 Why study Brand Identity in Services?

Prior work on branding suggests that the two key features of a brand are its meaning and identity (Dibb & Simkin, 1991). Brand identity connotes what the brand stands for, who the brand is and what its characteristics are. Just like individuals have their own unique identity, brands are also considered to have a unique and differentiating identity. The concept of brand identity has gained increased academic attention since the early 1990’s (Coleman et al., 2011) and since then the majority of focus has been on product brands. Thus, there is a lack of research on brand identity in the context of services.

Brand identity can play a particularly important role for services since it can help consumers differentiate between various available service brands. Brand identity elements like brand name (Keller, 2005) can help consumers in the decision making process, since brand name is among the few cues available to a customer while evaluating a service brand before consumption (Turley & Moore, 1995; Tepeci, 1999; Grace & O'Cass, 2005; Degeratu et al., 2000). Therefore, research on brand identity in the service context can highlight how service marketers can make use of such elements to differentiate their brands in the eyes of customers and strengthen their association with it.

Differentiating a tangible product brand may be relatively easier because it can use advertising, promotion, packaging, etc. to differentiate the brand in the eyes of customers. However, differentiating a services brand can be a difficult and lengthy process. This can be attributed to the intangible nature of services that pose a greater risk that consumers will treat services as commodities (McDonald et al., 2001). Kimpakorn & Tocquer (2010) suggest that in services, the brand must be built first through the elaboration of a brand identity and then through the efforts of employees to communicate the brand promise. Therefore, it can be argued that the creation of a proper identity is important to develop distinctively relevant service brands. (McDonald et al., 2001).

An issue for many service providers at the brand establishment stage is how to effectively convey the value proposition behind an innovative service. Service marketers seek ways to communicate the inexperienced experience (Berry, 2000). Creating and maintaining a strong brand identity can enable service marketers to achieve these objectives. Thus, based on these arguments, it is believed that this topic/area carries important implications for the brand management process and has the potential to contribute to the development of branding as well as services marketing literature in a meaningful way.

Collectively, this section lays the foundation that brand identity research has the potential to be of use to service marketers. This is because there are differences between attributes of services and goods transcend over three levels. Such differences can play a key role in developing literature on service brand identity (SBI). The next section takes this discussion further by exploring the theoretical underpinnings in the area of brand identity and critically reviewing extant literature. By way of preview, the next section shows that current literature/prior work has unilaterally focused on developing BI frameworks that are applicable in a goods-context.

## 2.3 Brand Identity

### 2.3.1 Introduction

The objective of this section is to understand how the brand identity construct is conceptualized and operationalized in the current literature. This will help in gaining a deeper knowledge about the concept before applying it to service context. This section presents a comprehensive review of brand identity literature which was conducted to study the existing definitions of this construct, its importance as an independent construct as well as with respect to other constructs, its dimensions, and antecedents and consequences.

The process of building a brand may take years to materialize with each and every component of the process playing a vital role in differentiating the firm and its products. The first step towards building strong brands requires creating and maintaining a strong brand identity (Madhavaram et al., 2005). Brand Identity is one of the most important concepts in the branding literature (Upshaw, 1995) and it plays a significant role in effectively managing brands and distinguishing them from the competitors (da Silveira et al., 2013; Nandan, 2005). It acts as a brand's fingerprint by providing meaning to the brand, making it unique and communicating what the brand stands for (Rosengren et al., 2010). De Chernatony (2010) also posits that brand identity helps in effectively positioning the brand and in maintaining a strong competitive position in the marketplace. Indeed, Kapferer (2000, p.90) considers brand identity to be an essential prerequisite for efficient brand management.

In order to gain a better understanding of brand identity and its meaning, first and foremost, it is important to appreciate how this concept is defined in the literature. The next section, thus, discusses the definition of brand identity proposed by various authors, followed by a section on the critical evaluation of the discussed definitions.

### 2.3.2 Brand Identity Definitions

It is important to review the existing definitions of brand identity for two reasons. First, it helps in giving the readers an understanding of the concept and reveals the *boundaries of the phenomenon* (DeVellis, 2003, p.60). Second, it is important to have a literature-based definition as a starting point for any research since it indicates a well-grounded approach and lays the foundation for new research to build upon it (Chuchill, 1979).

Talking in general about identity, De Chernatony (2010) suggests that identity represents the ethos and values of a brand which result in creating a sense of individuality, thereby laying the foundation for differentiating the brand in the marketplace. Various definitions of Brand Identity (BI) have been proposed in the branding literature. They will now be discussed in a chronological order to see how the definition of this construct has evolved over time. According to Csaba & Bengtsson (2006, p.119), Kapferer characterized identity as the brand's innermost substance and was the first to launch a comprehensive framework on it. In 1995, Upshaw defined brand identity as the "configuration of words, images, ideas, and associations that form a consumer's aggregate perceptions of a brand (p.12)" The author argued that brand identity is the consumer's perception of what has been created since he receives the brand's messages through a series of filters in his life and hence the only true brand identity is what settles into his brain; "the rest are only intentions and wasted messages" (p.13).

Aaker (1996), in contrast to Upshaw (1995), proposed the definition from a different perspective. Aaker (1996, p.68) defined brand identity as "a unique set of brand associations that the brand strategist aspires to create or maintain." This definition suggested that BI is created and maintained by the 'brand strategist' with consumers having more of a passive role to play, e.g. being a receiver of the communication sent from the organization members.

A majority of the research post-Aaker's (1996) work has built upon or slightly modified Aaker's definition of brand identity (e.g. De Chernatony, 1999; Gylline & Lindberg-Repo, 2006; Alsem & Kostelijk, 2008). More recently, Coleman et al. (2011, p.1064) also proposed a definition of brand identity in the context of B2B services. The authors defined "B2B service brand identity as the strategist's vision of how a B2B service brand should be perceived by its stakeholders." This definition complies with Aaker's (1996) definition of brand identity in the sense that both authors consider brand identity to be a strategist's vision. It is important to note that most of the above definitions posit that brand identity is associated with a manager's, marketer's, companies' or strategist's vision or how they want their brand to be perceived by consumers. The next section presents a critical discussion of the review of brand identity definitions.

#### 2.3.2.1 Critical Discussion: Brand Identity Definitions

The previous section presented a review of the definitions of brand identity prevalent in the literature and it also suggested that the current definitions consider brand identity to be emanating from a brand strategist's perspective. This is evident since most of the definitions (except Upshaw, 1995) posit that brand identity is associated with a manager's, marketer's, companies' or strategist's vision of how they want their brand to be perceived by consumers. This implies that the current brand identity literature, particularly the definitions, have followed a myopic viewpoint which hinders the appreciation of brand identity from other viewpoints (e.g. other stakeholders). This is critical. Emerging research has provided evidence that consumers also actively take part in developing brand identity (da Silveira et al., 2013; Csaba & Bengtsson, 2006). Consumers help in building BI through various channels, such as communicating the knowledge and experience related with a brand, their evaluations and expectations regarding the brand etc. Thus, managers are not the sole creators of brand identity; consumers also play an active role in this process.

Branding research is now beginning to consider building brands by taking into account consumers' as well as the firm perspective (Payne et al., 2009). This may be attributed to research calls by various authors who highlighted the need for research that better specifies marketing constructs by taking into account the consumer's perspective (e.g. Gummeson, 1995; Rust, 1988). This issue is more pressing in the services context since "a service provider without customers cannot produce anything" (Gummeson, 1998, p.247).

While examining the concept of BI in a service context, one cannot overlook the role of consumers who form an important part of the overall service offering (Gronroos, 1982). Unlike consumer of goods, the consumer of a service participates in the production process of a service firm (Gronroos, 1982). They provide information or they themselves act as the raw material to be transformed into a service output (Bowen & Schneider, 1988, p.48). Through such participation, the consumer is able to form an opinion of the service and related aspects based on his evaluation of the different resources and activities available during the production process (Gronroos, 1982).

Recently, Vargo & Lusch (2004) affirmed that there has been a paradigm shift from a goods-dominant view to a Service-Dominant (S-D) view. While under the goods-dominant view customers play a minimal role in the production process, under the S-D view they play an active role with the suppliers/producers by engaging in dialogue and interacting during various stages of the production process. The S-D logic has significant implications for the branding literature as well. First, researchers (Arnould et al., 2006; Payne et al., 2009) observe that within the context of the S-D logic, it is now time to revise the domain of branding by looking at branding issues from the consumer perspective as well. This is important, as the "dominant, goods-centred view of marketing may not only hinder a full appreciation for the role of services but also may partially block a complete understanding of marketing in general" (Vargo & Lusch, 2004, p.2).

Thus, based on the above arguments, this thesis proposes that it is important to account for the consumer perspective when developing brand identity.

### 2.3.3 Conceptual Models and Frameworks on Brand Identity

In the branding literature, there are several views on brand identity and several conceptual models to explain the phenomenon (da Silveira et al., 2013), however, the definitions and conceptual models do not appear to always convey the same meaning (Csaba & Bengtsoon, 2006). Many researchers have designed models and theoretical frameworks which describe different components or dimensions of brand identity (e.g. Upshaw, 1995; Aaker, 1996; Kapferer, 2000; De Chernatony, 1999; Ghodeshwar, 2008; Burmann et al., 2009; da Silviera et al., 2013). Some of the prominent models are described below in detail and a critical discussion follows in section 2.3.3.1. The reason for discussing these models/frameworks is that these studies form the core of brand identity literature and are the most cited studies within the branding literature (e.g. Coleman et al. 2011, Janonis et al. 2007). This means that this section *only* describes the models while section 2.3.3.1 discusses their shortcomings and implications for this research.

***Aaker's (1996) Brand Identity Planning Model***

Aaker (1996) theorized a brand identity planning model, stating that a firm must consider its brand from four brand identity perspectives, namely, brand as a product, an organization, a person, and a symbol. He proposed a unique set of dimensions under each perspective highlighting that the main objective of these perspectives is to assist the strategist in considering different brand elements and patterns that can help clarify, enrich, and differentiate an identity (p.78).

Under the *brand-as-product* perspective, the author addressed six dimensions namely product scope, product attributes, quality/value, uses, users and country of origin. He further suggested that these attributes are an important part of brand identity since they are directly related to the brand choice decisions and the user experience.

The *brand-as-organization* perspective pays attention to the attributes of the organization like innovation, drive for quality, and concern for the environment, created by the people, culture, values, and programs of the company (p.82).

**Table I Brand Identity Model Summary**

| Model/Framework name | Author(s) | Brief description |
|---|---|---|
| Brand Identity Planning Model | Aaker (1996) | This model states that firms must consider its brand from four brand identity perspectives, namely, brand as a product, an organization, a person, and a symbol.<br>The main objective of these perspectives is to assist the strategist in considering different brand elements and patterns that can help clarify, enrich, and differentiate an identity |
| Extension of Brand Identity Planning Model | Moorthi (2002) | Extended Aaker's (1996) conceptualisation of brand identity by adding *brand-as-process* perspective for services. |
| Brand Identity Prism Model | Kapferer (1997) | Six sided brand identity prism model is based on six aspects of brand identity, which are: a) physique, b) personality, c) culture, d) relationship, e) self-image, and f) reflection |
| Brand Identity model | De Chernatony (1999) | This model suggests that the main components of brand identity are: Brand vision, culture, positioning, personality, presentation and relationships |
| PCDL Model | Ghodeshwar (2008) | This model was introduced using literature review and case study approach. The PCDL model provides step by step guide to build brand identity by positioning the brand, communicating the brand message, delivering the brand performance and leveraging brand equity |
| Identity based Understanding of Branding | Burmann Hegner and Riley (2009) | This framework undertakes a two dimensional approach towards brands – the brand as perceived by actual and probable buyers (through brand expectation and brand experience) and the brand as built and managed by the owner or manager of the brand (through brand promise and brand behavior) |
| Theoretical Framework on Brand Identity | Da Silveira et al. (2013) | This framework provides new insights into brand identity management by suggesting that both, managers and consumers participate in creating and managing brand identity, thus, suggesting that it is a two-way process |

Aaker (1996) relates the *brand-as-person* perspective with brand personality and suggests that a brand can be treated like a person who is competent, trustworthy, fun, active, humorous, casual or intellectual. The brand's personality can serve as a basis for a relationship between the customer and the brand.

Lastly, Aaker (1996) discusses the *brand-as-symbol* perspective and contends that a strong symbol can provide cohesion and structure to an identity and make it much easier to gain recognition and recall. He primarily discusses three types of symbols, namely, visual imagery, metaphors and the brand heritage. The author quotes that visual imagery can include symbols that are powerful and memorable (e.g. Nike's swoosh), whereas metaphors provide more meaning to the symbols, for example, the energizer bunny for long battery life.

***Moorthi's (2002) extension of Aaker's (1996) model***

Moorthi (2002) extended Aaker's (1996) conceptualisation by adding *brand-as-process* to brand a service. The author mapped the 7Ps of services to Aaker's model and then applied it to the economic classification of three types of goods (search, experience and credence). The first five P's namely, product, price, place, promotion, and physical evidence were mapped to Aaker's brand as product perspective. The sixth 'P' i.e. the people dimension was put under the brand as organization perspective, whereas the process dimension was highlighted separately as brand as process. No changes or inclusions were made to brand as person and brand as symbol perspectives.

He then selected various products having search properties, and services having experience and credence properties. The basis was that search properties are prominent in products, whereas experience and credence properties are prominent in services. Further, the impact of the modified model on this economic classification of goods was then examined.

***Kapferer's (1997) Brand Identity Prism Model***

Kapferer (1997) suggested a six sided brand identity prism model based on six aspects of brand identity, which are: a) physique, b) personality, c) culture, d) relationship, e) self-image, and f) reflection. The author distinguishes a sender and recipient side, and an externalisation and internalisation side using a six sided prism. These six faces are described below:

*Physique* relates to the brand's physical features like colour, form and brand qualities. It helps in answering questions like – what does the brand look like? What can a consumer do with it in terms of functionality? How can it be recognised?

*Personality* defines the brand's character. This is an internal, intangible facet and forms the soul which is relevant for brands. It can be formed by using a specific style of writing, using specific design features, and using specific colour schemes.

*Culture* signifies the system of values and basic principles on which a brand has to develop its behaviour. Culture forms a direct link between brand and organization.

*Relationship* is an exterior facet and defines the behaviour that identifies the brand for example *'Yves Saint Laurent brand functions with charm…IBM symbolises orderliness'* (p.103) The relationship facet is perhaps more important for service brands than for the product brands, as a service is, by definition a relationship.

*Reflection* is also an external intangible facet reflecting the customer as he or she wishes to be seen as a result of using a brand.

*Self-image* reflects the customer's attitude towards the brand. For example, a Porsche owner thinks that others will think he is rich because he can afford such a flash car.

The brand identity prism enables brand managers to assess the strengths and weaknesses of their brand using these six aspects of this prism.

***De Chernatony (1999)***

Taking Kapferer's (1997) brand identity prism model as a reference, Chernatony (1999) suggested a model of brand identity, whose major components are:

*Brand vision* – According to the author, a brand must have a sharp vision which can provide a clear sense of direction. It is important for managers to be able to foresee the brand's environment at least five years forward in order to decide *"how it will make the futuristic world better."* (p.166)

*Brand Culture* – The author considers it important to audit the brand's culture in order to develop or refine a strategy suitable to fulfill the brand's vision. Culture can be seen in the visible artefacts, employees' and managers' values and the mental models of people involved in brand building activities. Therefore, an audit can highlight the gaps between the desired and current components of culture thereby showing the aptness of an organization's culture to help realize the brand's vision.

*Brand Positioning* – The third stage of the model considers the suitability of brand's positioning against the vision and core values. This is because the positioning is reinforced through artefacts, which give stakeholders cues about the brand's performance characteristics (p.168).

*Brand Personality* – The personality component of brand identity is mainly responsible for featuring the brand's emotional values through the personality metaphor.

*Brand Relationship* – The establishment of a brand's personality and positioning leads to the formation of a relationship, which is defined by the values inherent in the brand's personality. The author shows that a brand participates in any relationship through the staff. Therefore, it is important to understand what types of relationships are appropriate between employees and other employees, between employees and customers and between employees and other stakeholders (p.169). The author suggests that employees must regularly evaluate how well their relationships emphasize the brand's values, personality and positioning.

*Brand Presentation* – This is the final step where the presentation styles are identified. The idea is to develop and maintain a consistent brand identity through coherent presentation. Staff from all departments must be careful in analysing how the stakeholders evaluate and select brands, so as to identify the discrepant cues and devise a more coherent presentation style.

***Ghodeshwar's (2008) PCDL Model***

Through literature review and case study approach, Ghodeshwar (2008) introduced a PCDL model for building brand identity. He suggested that this model acts as a guide to build brand identity by following four steps namely:

*Positioning the brand* ***(P)*** – Positioning is related to the perceptions of the customer about a brand and its differentiation from the competitor's brand. Proper positioning can lead the customers to perceive that the brand is satisfying a consumer's need/expectations.

*Communicating the brand message* ***(C)*** – the next step in building brand identity should be to exhibit the brand's value to the target customers by designing and executing long-term integrated communication strategies. Firms can use advertising, direct marketing, sales promotion and various other communication channels to position the brand in the mind of consumer.

*Delivering the Brand Performance* ***(D)*** – The author suggests that brand performance can be delivered by continuously tracking the progress of the brand. This can be done in terms of analyzing how a brand is performing in the market, how is it coping with the competition, what is the level of its consumption, purchasing, brand recognition, recall, etc. This approach can help in measuring the outcome of marketing campaign in persuading the target consumers and adjusting marketing strategies to achieve the desired brand performance.

*Leveraging the brand Equity* ***(L)*** – Once the desired brand equity of a brand is established, firms can employ various strategies like brand extension, line extension, ingredient branding and co-branding, in order to leverage its equity.

***Burmann Hegner and Riley's (2009) Identity based Understanding of Branding***

Burmann et al. (2009) adopt a two dimensional approach towards brands – the brand as perceived by actual and probable buyers and the brand as built and managed by the owner or manager of the brand. The authors explain the model of 'Identity based understanding of branding' by discussing four key constituents namely brand promise, brand behaviour, brand expectations and brand experience. While brand promise and brand behaviour emanate through the internal stakeholders, brand expectations and brand experience are held by the external target group. The authors consider brand promise to be 'the condensed core of the brand identity' which determines the external stakeholder's brand expectations. They suggest that employees should exhibit consistent behaviour at all brand touch points to keep their brand promise and to make sure that the external target groups' brand experience is along the lines of their brand expectations.

***Da Silveira et al.'s (2013) Theoretical Framework on Brand Identity***

The latest model on Brand Identity is the one proposed by da Silveira et al. (2013). The authors suggest that marketing and communication strategies, formulated by brand managers, facilitate in letting a brand perform, whereas consumers build their individual and collective identities in order to perform. The face-to-face or mediated contacts, which occur directly or indirectly, among the brand and the consumer, are called *Encounters.* These encounters can be initiated through three sources - from the management's side, for example via advertising, from the customer's side, for example via blogs or from both sides for example through involvement of consumers in product design.

Another important dimension is the *brand face* which communicates a positive expression of the brand management to consumers. Through this dimension, management can exhibit the expressions of the brand which it wishes to communicate to consumers. The consumers or the potential consumers present their positive expressions, as performers in the consumer-brand interaction, through the *consumer's face*. Further, the authors propose that brand identity needs to be dynamic in nature in order to maintain, both, the brand face as well as the consumer face. Brand identity, therefore, must be continuously adjusted so as to preserve the consistency of both. Apart from the dimensions discussed above, competition, industry, environmental conditions, and partner's actions can also have an impact on the notion of brand. According to the author, the framework can be useful in specifying relations between these dimensions and helping brand managers in developing brand identity.

A critical discussion on these brand identity models is provided in the next section that draws attention towards the limitations of these models and their implications for this research.

#### 2.3.3.1 Critique of Brand Identity Conceptual Models

As discussed in section 2.3.3, existing brand identity literature has been informed by a number of key conceptual models (e.g. Upshaw, 1995; Aaker, 1996; Kapferer, 2000; De Chernatony, 1999; Ghodeshwar, 2008; Burmann, et al., 2009). These models form the core of the brand identity literature. Despite this, there are many research gaps in the brand identity literature that need to be addressed. This section draws attention towards the limitations of these models and their implications for this thesis.

***Limitation 1: Extant conceptual models have not been empirically tested, thereby resulting in ambiguity over dimensions of brand identity and their validity***

The BI conceptual models have not been subjected to empirical testing thus making it difficult to gauge their robustness, validity and applicability in different contexts. Many of the models have not been proposed/established through any qualitative or quantitative methodology like interviews, surveys, ethnography etc., rather these models remain largely conceptual. This poses difficulties in deciding which author’s work is more credible and which model to use as a base to carry out further research.

Due to the lack of empirical testing of these models, it is difficult to gauge the key dimensions of brand identity. Considering all the models discussed in section 2.3.3 it is difficult to identify a dimension that is parsimonious or unanimously agreed upon. While there are some dimensions that are highlighted in more than two or three models (e.g. Brand Personality, Brand Communication), there are many others that are unique to one particular model (e.g. Brand experience, brand promise). The discussion clearly demonstrates that there is no visible agreement among researchers on the key dimensions of brand identity. For instance, dimensions such as brand behaviour and brand promise have not been considered by authors like Aaker (1996) and Moorthi (2002). However, these dimensions are considered to be very important by Burmann et al. (2009). Similarly, Aaker (1996) has considered ‘organization’ to be a component, whereas De Chernatony (1999) and Kapferer (2000) have not considered this. Such discrepancies may be attributed to the lack of empirical testing of the models.

This limitation implies that there is a need for more empirical research in this area to establish the key dimensions of brand identity.

***Limitation 2: There is limited research which focuses on measuring brand identity***

The presence of multiplicity of conceptual models in the brand identity literature suggests that the conceptual domain has received much attention from researchers; however, the measurement of brand identity is an area that still warrants more research. Specifically, there is a very limited research on scale development in the area of brand identity. Given the importance of brand identity, a scale can further assist researchers in exploring other aspects of brand identity (e.g. antecedents, consequences) with more robust and valid results, thereby enriching the empirical domain of brand identity literature.

One of the ways to address this issue is to be able to develop a scale to measure brand identity. The scale can be helpful in many ways since it can not only unearth the key dimensions but also help in assessing the impact of brand identity on other constructs thereby highlighting the antecedents and consequences of brand identity.

***Limitation 3: Current brand identity frameworks have been conceptualized from a goods-dominant perspective, leaving much ambiguity over their applicability to a service context***

The applicability of these models to different contexts like goods and services is not clear. Taking into account, the discussion presented in section 2.2.2 of this chapter, it is now generally acknowledged that service marketing is sufficiently different from goods marketing to warrant separate treatment (Edgett & Parkinson, 1993; Shostack, 1990), at least part (if not all) of these models might not be applicable to the service context. It is also possible that some of the dimensions might be more or less significant for service brand identity compared to goods and vice versa. Research needs to consider that there is a need to adapt the current brand identity conceptualisation to suit better to service brands.

***Limitation 4: Brand identity research relies heavily on managerial perspective, lacking account of consumer perspective of brand identity.***

Brand identity needs to take into account the consumer perspective since they are also participants in the development of identity, as opposed to relying primarily over a managerial perspective. The consumer perspective must be considered in the creation and development of brand identity for two main reasons.

First, conceptually, the relationship between identity and the consumer is based on the fact that people can only develop strong relationship with a brand they "know" (Alsem & Kostelijk, 2008; He et al., 2012). A brand's identity acts as a stable point of reference for consumers (Alsem & Kostelijk, 2008, p.911). Since consumers collect information about a brand from various sources and get to know its identity, it is critical to understand the consumer perspective when developing brand identity. This will help in arriving at a holistic understanding of brand identity and will help marketing managers make better decisions.

Second, incorporating the consumer perspective in developing brand identity might lead to an identity that satisfies their symbolic needs more than any other competitive brands. Businesses spend billions of dollars trying to create brand identities, to have a competitive edge in the marketplace, and yet many brands fail (Wheeler, 2003). Consumer inputs can, thus, educate marketers in determining the factors that are deemed important by consumers and that help develop brand identity in their minds, thereby providing opportunity to managers to focus more on those aspects, and channel their resources to strengthen the factors that are not only important in developing brand identity but are also noticed by consumers. Firms that are aware of their consumers' understanding of brand identity can take advantage of it during 'encounters' with consumers (da Silveira et al. 2013) by making sure that they communicate the identity that is well received by the consumers.

#### 2.3.3.2 Research Aim

The previous section identified and discussed four key limitations of the current brand identity literature. Keeping focus on the service context, this thesis aims to address these limitations by developing and validating a scale to measure Service Brand Identity (SBI). Not only would the scale help in measuring brand identity (thereby addressing limitation 2), but will also highlight the key dimensions of service brand identity relevant to the consumers (thereby addressing limitation 1 and 4).

#### 2.3.3.3 Rationale for scale development

“Measurement is a fundamental activity of science” (DeVellis 2003, p.2) which involves "rules for assigning numbers to objects to represent quantities of attributes" (Nunnally, 1967, p.2)**.** It is challenging for social science researchers to measure phenomena that are intangible and difficult to directly observe (DeVellis, 2003). To overcome these challenges, researchers develop measurement scales to measure the phenomena that cannot be assessed directly but are believed to exist due to theoretical understanding of the world. For example, constructs like personality, experience, perceived quality and reputation etc. are not directly observable or measurable since these may be some form of beliefs, expectancies, attitude (Parasuraman et al., 1988), emotions, or perceptions which are difficult to measure directly (DeVellis, 2003). However, marketing literature indicates that, using scale development procedures, researchers have developed brand personality scale (Aaker, 1997), brand experience scale (Brakus et al., 2009), service quality (SERVQUAL) scale (Parashuraman et al., 1988), corporate reputation scale for service firms (Walsh & Beatty, 2007).

The development of measurement scales has benefited the literature by providing a sound empirical understanding of the constructs and by enabling researchers to use these scale to assess the impact on other phenomenon. For instance, the brand personality scale has been used across studies to examine the association between brand personality and consumer personality (e.g. Swaminathan et al., 2009; Park & John, 2010; Gao, et al.,2009).

Developing a measurement scale for brand identity can offer similar benefits. Drawing an analogy from the above arguments, brand identity is one such phenomenon that may not be observed directly. Therefore, just like measurement scales for the other intangible constructs, one can be developed to measure brand identity too.

As discussed before, brand identity is considered to be one of the most important concepts in the branding literature (Upshaw, 1995). Jankovic (2012, p.92) asserts that "the identity of the brand is crucial in developing relations with the consumer as well as in creating consumer's experiences along with the brand." The importance of brand identity is further highlighted by the fact that without having a strong brand identity, there will be no attraction, companies will not be able to charge premium prices, and the brand might face difficulty in gaining consumer trust and loyalty (Schmitt & Simonson, 1997).

Given such importance of brand identity, it is imperative to develop a measure of brand identity that further allow researchers in assessing the relationship between BI and other consumer and branding constructs. Not only this, the scale will also allow researchers to explore the antecedents and consequences of brand identity and empirically establish such relationships. Thus, it is evident that a measurable phenomenon like brand identity will have significant applications in the empirical literature.

## 2.3.4 Consequences of Brand Identity

### 2.3.4.1 Introduction

Although not yet fully explored, the literature suggests that there is a positive link between brand identity and trust (Burmann et al., 2009; Ghodeshwar, 2002) and an indirect positive link between brand identity and loyalty with brand trust playing a moderating role (He et al., 2012). In this sense, it can be argued that brand trust and loyalty are the two main consequences of brand identity. However, the research that explores the relationship between brand identity and loyalty and trust has not been able to provide much in-depth insights. Most of the research that highlights any relationship has been exploratory or only conceptual (e.g Burmann et al., 2009; Ghodeshwar, 2002; Schimtt & Simonson, 1997).

The next section discusses the two constructs: brand trust and loyalty in detail and develops a case for studying their relationship with brand identity. Brand trust is discussed first, followed by brand loyalty.

### 2.3.4.2 Brand Trust

In recent years, brand trust has gained increasing research attention due to its fundamental and ubiquitous role in binding relationships (Ring, 1996), building commitment (Warrington et al., 2000), facilitating co-operation and mutual adaptation (Tyler & Stanley, 2007 cf. Hewett & Bearden, 2001; Mayer et al., 1995), enhancing customer relationships (Li et al., 2008 cf. Selnes, 1998), and building customer loyalty (Singh & Sirdeshmukh, 2000; Ball et al., 2004) and brand equity (Chaudhuri & Holbrook, 2001).

Brand trust exists as the willingness of customers to consider a brand reliable in terms of meeting its stated functions and attributes (Burmann et al., 2009; Chaudhuri & Holbrook, 2001; Morgan & Hunt, 1994; Sung & Kim, 2010), thereby mitigating any customers' perceived risk (Lau & Lee, 1999; Delgado-Ballester, 2004)

Tyler & Stanley (2007, p.335) suggest that one way to look at brand trust is in terms of perceived trustworthiness, i.e. "as a cognitive or affective belief held by one party that its partner will not exploit their vulnerability." In a branding context, this might mean that it is the belief held by the customer that the brand will not exploit their vulnerability. Another way to look at brand trust is in terms of its behavioral components, i.e. “the willingness to rely on a partner in whom one has confidence” (ibid). From the above definitions, it can be inferred that brand trust plays a crucial role in managing risk, uncertainty and vulnerability associated with exchange (Tyler & Stanley, 2007).

Sung & Kim (2010) suggest that brand trust is made up of two key components which are expertise and trustworthiness. They suggest that consumers will perceive the brand to have expertise if they perceive it to be skilful and knowledgeable, whereas trustworthiness comes from the assurance that the brand will be able to deliver its promise in terms of the quality in an honest manner. Sung & Kim (2010) summarize the factors that can increase brand trust as - consumers’ belief about the brand being reliable, consistent, competent, responsible, helpful, fair, and honest. Tyler & Stanley (2007) suggest six central components of trust, namely, reliability, honesty, predictability, mutuality, benevolence, and forbearance from opportunitism.

Research suggests that trust plays an important role in reducing transaction costs and limiting uncertainty and opportunitism (Tyler & Stanley, 2007). In services, trust plays an even more important role since it underpins the experience and credence qualities of services (Zeithaml, 1991) and assists in facilitating interaction and developing relationships (Ford et al., 2003). Newholm at al. (2004) claim that trust enables customers to differentiate between service providers. Therefore, trust is an important aspect in branding, irrespective of the context (whether in goods or services).

Research in the area of marketing suggests that there is a close relationship between brand identity and brand trust. For example, Burmann et al. (2009, p.391) mention that "brand identity constitutes a necessary condition for maintaining buyer's trust, which in turn is the basis for long-term customer relationship and brand loyalty." Similarly, Ghodeshwar (2002) suggests that a strong brand identity when well communicated to and experienced by customers results in developing brand trust. This could manifest in the form of a strong brand identity, e.g. a brand's identity may be communicated as being honest, reliable, or fair – all of which may help in communicating that the brand is reliable or trustworthy.

The relationship between brand identity and trust can also be visualized as a process that starts with identity that attracts consumers towards a brand (Schmitt & Simonson, 1997), then consumers build a relationship with the brand over time (Fournier, 1998) and trust moderates in strengthening that relationship (Morgan & Hunt, 1994). Put differently, *identity represents a necessary condition for the development of trust* (Burmann et al., 2009). Thus, on the basis of the above arguments, this research posits that there is a positive and significant relationship between brand identity and trust i.e. a strong brand identity will lead to a higher amount of trust in the brand. This thesis will use the service brand identity scale to test this proposition.

#### 2.3.4.3 Brand Loyalty

Brand loyalty exists as an integral component in companies' marketing plans (Aaker, 1996) and the key to strong brand performance in terms of higher market share and charging higher prices with respect to competitors (Chaudhary & Holbrook, 2001).

Brand loyalty is defined as “a deeply held commitment to re-buy or re-patronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior” (Oliver, 1999, p.34). This definition incorporates two different aspects of brand loyalty: behavioural, dealing with the willingness to engage in repeat purchase behaviour, and attitudinal, which results from a greater degree of affect or liking towards the brand.

In a fundamental sense, brand loyalty can be characterized as a mechanism through which consumers are able to express their satisfaction after using a service (Bloemer & Kasper, 1995). There is also arguably the mediating effect of brand trust here. For instance, Lau & Lee (1999) posit that loyalty is necessarily preceded by a high level of trust towards a brand. On the basis of these arguments, we posit that brand identity affects loyalty through a direct and indirect route (He et al., 2012).

“Brand identity helps in establishing a relationship between the brand and the customer by generating a value proposition involving functional, emotional, or self-expressive benefits (Aaker 1996, p.168)”. Various researchers posit that strong brand identity results in a greater degree of identification by the customers with the brand, thereby resulting in a stronger customer-brand relationship (e.g.

He et al., 2012; Jankovic, 2002; Fournier, 1998). Stronger brand-customer relationships in turn elicit (or lay the foundation for) a behavioural response from the consumers where they are more likely to prefer the product or service in the future, i.e. remain loyal (Oliver, 1999; Fournier & Yao, 1997). Customers may also display a high degree of commitment due to the unique set of associations of the brand (i.e. identity), thereby exhibiting affective loyalty. In the same vein, Schmitt & Simonson (1997) and Kathman (2002, p.31) suggest that strong brand identity may help in attracting customers to a brand and facilitate customer loyalty and retention. To the extent that loyalty is grounded in the existence of a valued relationship between consumer and the brand (Oliver, 1999), brand identity is expected to be positively associated with brand loyalty.

The impact of identity on loyalty can also be indirect, with brand trust playing a mediating role in the impact of identity on loyalty. For instance, a high level of brand trust may result in higher level of loyalty towards the brand (Chaudhary & Holbrook, 2001; Lau & Lee, 1999). Since brand identity affects the trustworthiness of brands (Tyler & Stanley, 2007), its role may be indirectly linked to brand loyalty, suggesting that it is brand identity that also plays a role in shaping loyalty.

Consider, a customer is strongly predisposed to remain loyal to a bank, a typical example of a service firm. One explanation for such behaviour could be due to a strong association with the brand's values, experienced staff who help him/her out in different issues, and service experience resulting in a more favourable affect (*i.e. dimensions of brand identity*). For instance, the customer might develop a strong degree of affect by interacting with the staff which can lead to greater degree of attitudinal loyalty (Chaudhary & Hoolbrook, 2001). This results in satisfying the customer's symbolic needs and develops a strong attitudinal support, thereby patronizing the customer to remain loyal. Put simply, such strong associations with the brand could be a result of a strong identity. Thus, there is a direct impact of a strong brand identity on brand loyalty.

Another possible explanation is that the consumer has developed a heightened degree of trust towards the brand, as a result of prior (good) experiences with this brand and (bad) experiences with other brands in the same industry. Due to a strong degree of trust, which is affected by brand identity, the customer prefers to remain loyal to this brand in contrast to other brands which were not perceived as trustworthy. This results in an indirect relationship between identity and loyalty. In other words, loyalty and identity should be associated, because stronger identity results in developing valued relationships for the customers with the brand either directly (by developing a strong customer-brand bond) or indirectly (through stronger trust). It is important to understand that brand trust is one of the factors that are considered to be playing a mediating role, and it is not exhaustive. This study aims to establish the degree of association between brand identity and loyalty. Thus, for the purpose of this study, it is proposed that a strong and positive association exists between brand identity and brand loyalty. This relationship will be further explored through subsequent analysis where the service brand identity scale will be used.

### 2.3.5 Brand Identity and other similar constructs – points of differences

The notions of brand identity, brand reputation and brand image frequently overlap in the literature. Brand identity is related but also conceptually distinct from other brand constructs, in particular, brand reputation and image. The following sub-sections help in differentiating brand identity from these constructs. First, the differences between brand identity and reputation are discussed and then differences between brand identity and image are discussed.

#### 2.3.5.1 Brand reputation

The general idea behind the concept of reputation is that a favourable general estimation of an individual or organization positively impacts the attitude and behaviour of the public towards that entity (Fombrun & Rindova, 1996; Fombrun & Shanley, 1990; cf Walsh & Beatty 2007, p.128). Reputation has many different definitions and forms. The literature on the concept of reputation can be divided into corporate reputation and brand reputation. Brand reputation refers to the reputation associated with a particular brand offered by a firm. On the other hand, corporate reputation refers to the perception of company's actions held by its stakeholders. Considering Procter and Gamble (P&G) as a leading corporate firm that serves many popular brands in beauty segment (for example, Gillette, Oral-B, Pantene, Olay etc.), it is easier to understand this difference. Corporate reputation will refer to the overall reputation (good or bad) of P&G in the eyes of its stakeholder, whereas brand reputation will refer to reputation of each individual brand (Gillette, Oral-B etc) based on each brand's evaluation by their consumers. Corporate reputation literature suggests that reputation is a result of past actions of a firm (Wang et al., 2003; Nguyen & Leblanc, 2001). Corporate reputation refers to the set of attitudes that are formed by consumers about a brand. These attitudes can refer to how consumers evaluate a brand over time (Gotsi & Wilson, 2001) and relate to "the overall value, esteem and character of a brand" (Selnes, 1993). Such consumer perceptions arise from their direct experience with the brand, through the brand communication channels, or simply from comparing the brand with its competitors (Gotsi & Wilson, 2001, p.29).

The concept of brand reputation is also commonly associated with consumer attitudes towards the brand, but is generally defined as the perception of quality associated with the brand name (Yoon et al., 1993; Selnes, 1993; Velotsou & Moutinho, 2009). For instance, customers may hold the brand in high regard which forms the brands' reputation. Thus, reputation is concerned with the perception of quality that is attached to the brand. However, brand identity is "a unique set of brand associations" (Aaker, 1996) that can be configured by words, images, ideas, symbols etc. (Upshaw, 1995).

More points of difference emerge if we consider the measurement of brand reputation. Veloutsou & Moutinho (2009) measure brand reputation using three items viz. 'this brand is trustworthy', 'this brand is reputable' and 'this brand makes honest claims.' Thus, their scale indicates the broad dimensions of brand reputation as being: when the brand is perceived to be reputable, trustworthy, and makes honest claims about its offerings. Herbig & Milewicz, (1995) suggest that customers form perceptions on these dimensions if the brand is able to deliver its promises and thus a necessary but not sufficient pre-requisite for brand reputation is customer experience. Thus, brand reputation forms ex post service or product delivery. However, such caveats do not apply to brand identity since a brand will have a unique identity irrespective of whether consumers have used it or not.

Another point of distinction is that a brand's identity is based on both intrinsic cues, for e.g. culture, history of the brand, technological support etc (Aaker, 1996; Upshaw, 1995) as well as extrinsic cues, for e.g. brand name, logo, colour associated with it, advertising etc. (ibid). However, brand reputation may not necessarily be a result of intrinsic cues since customers face difficulty in evaluating these cues (Selnes, 1993). Brand reputation is, thus, based or formed primarily through the use of extrinsic cues by consumers. This is explained by Selnes (1993) who suggests that since the intrinsic cues are seldom visible to consumers, they make use of extrinsic cues (for example pricing or packaging) that are related to the product but are not the part of the core product itself. "A brand will thus have a perception of overall quality not necessarily based on knowledge of detailed (intrinsic) specification associated with it." (Selnes,1993, p.20). Since brand reputation is the perception of quality associated with the brand name (Zeithaml, 1988; Shapiro, 1983), it is evident that it is primarily based on extrinsic cues as opposed to brand identity that is based on both intrinsic as well as extrinsic cues. Brand identity is what the brand is, it does not imply that it is good or bad, whereas reputation does imply an evaluative judgment.

Thus, these points of differences explain that brand identity and brand reputation are conceptually distinct concepts and will be treated so in this thesis.

### 2.3.5.2 Brand identity vs Brand image

The difference between brand identity and brand image was blurred until the early 1990s and was not very clear due to overlaps in the meanings of these two terms. This is because the literature before the 1990's highlighted definitions of brand image that were very similar to the current definitions of brand identity. For example, current definitions of brand identity indicate that it is a set of brand associations that the brand strategist aspires to create or maintain (Aaker, 1996) and that brand identity helps in differentiating brand from others (Kapferer, 2001). Interestingly, brand image also has a similar semantic construction, for example, Park et al. (1986, p.136) suggest that "the image is a perception created by marketer's management of the brand", Reynolds & Gutman (1984) state that brand image is "...the set of meanings and associations that serve to differentiate a product or service from its competition." However, some of the brand image definitions provide a richer and substantial meaning of brand image by stating that image is basically a consumer's interpretation or perception of the brand. For example, Levy (1978) suggests that "A brand image is a constellation of pictures and ideas in people's minds that sum up their knowledge of the brand and their main attitudes towards it." Bullmore (1984) offers a similar definition of brand image by stating that "a brand's image is what people think and feel about it...the image lies in the mind of the beholder - and is conditioned at least as much by the nature of the beholder as by the nature of the object itself." Image thus relate to the outer appearance of the brand, whereas identity includes this and also inherently what the brand stands for, the values as well as what can be seen.

The fundamental difference between brand identity and image is based on two levels. First, in terms of defining the construct and second, in terms of how these constructs are operationalized and measured.

Image is defined as the set of meanings through which consumers can describe or relate to an object, e.g. product, brand, or service (Dowling, 1986). In the same vein, brand image is defined as the set of symbolic meanings and perceptions attached by consumers towards the brand (Padgett & Allen,1997; Low & Lamb, 2000). Put simply, the image of a brand is the depiction of the brand in the mind of consumers (Aaker, 1996; Keller, 1993). Typically, this mental picture is associated with specific characteristics of the brand (Dobni & Zinkhan, 1990) and could be based on product-related attributes and the type of benefits derived from consuming it (functional, experiential or symbolic) amongst other things (Keller, 1993). For instance, consumers may perceive a brand's image to be friendly, clean, or luxurious. Thus, image refers to the way in which customers may form perceptions by collecting and decoding information from different sources (e.g. communication channels, product or services offered) about a brand (Kapferer, 2000). By contrast, brand identity represents the brand's innermost substance (Kapferer, 2000) and is not based on the perceptions of consumers. Kapferer (2000) suggests that brand identity communicates a coherent message and expressing the unity and durability of the brand. Thus, brand identity primarily deals with providing meaning to the brand and communicating what the brand stands for. This difference is intuitive yet critical to distinguish between the two concepts.

In the context of how the constructs are operationalized, brand image is generally measured using the research statements of how consumers feel towards a brand or what their impressions are of a particular brand. For instance, Cretu & Brodie (2007) operationalise brand image by asking consumers to rate a brand's image as being fashionable, reputed, elegant, sophisticated, useful, well known etc. Clearly, these dimensions are derived from the consumer psychology domain and generally relate to the internal construction of consumer's impression about a brand. On the other hand, brand identity is generally said to comprise of visual imagery like logo, colour, brand name; brand personality, product attributes etc (Aaker, 1996). Thus, a major difference between these constructs lies in the way these are operationalised.

## 2.4 Chapter Conclusion

This chapter provided a firm foundation for advancing towards the research goals of this thesis. It reviewed the literature on service branding and brand identity, and doing so it identified the areas where research exists and areas where research is still needed. First, it provided a general understanding of service branding, then it justified why it can be beneficial and important to study brand identity in the context of services. It then provided a discussion on the concept of brand identity, highlighting that it is an important concept, and has brand trust and loyalty as its consequences. Second, it provided a detailed account of the brand identity models and theoretical frameworks that form a major part of the literature. Third, through a critical discussion of these brand identity models, various shortcomings in the literature are highlighted. For example, brand identity measurement has not received much attention; there is a need for more empirical research in this area, a need to incorporate the consumer perspective and apply and test this concept in different contexts in particular services. Lastly, this chapter justified the need for such research and thereby laid the foundation for subsequent chapters.

# Chapter 3 METHODOLOGY

## 3.1 Chapter Introduction

This chapter presents the 'process of knowing', in other words, the research methodology that guided the completion of this research. It addresses research design issues, the scale development process, data collection and analyses methods. The contribution of this chapter to this thesis is in terms of providing a detailed description of the process through which this research was conducted. It discusses the major decision points and issues that arose during various stages of the research and how they were resolved. This chapter, therefore, enables the researcher to draw upon the process and progress further to advance knowledge in the area of branding and services marketing by fulfilling the research objectives.

The literature review chapter (Chapter 2) examined the extant brand identity research and concluded that research in this area, especially with regards to measuring brand identity, is limited in several respects:

- Brand identity literature has received little empirical attention to date. Particularly, there is a lack of research on brand identity measurement.
- Due to multiplicity of conceptual models, there is little consensus on the key dimensions of brand identity. Thus, it is difficult to identify dimensions that are parsimonious or unanimously agreed upon.

- The majority of studies on brand identity have taken account of the practitioner or academic point of view, leaving out the most important viewpoint – customer’s point of view. This raises the need for brand identity studies to focus on end-use customers.
- The applicability of brand identity research in the service context is lacking which indicates a need for research that focuses on this context.
- The literature suggests that there are many hypothesised but untested relationships, for e.g. between brand identity and brand trust and loyalty. Thus, developing a scale to measure brand identity can help in testing such relationships thereby enriching the empirical research in this area.

This study aims to address these issues and advance research in the area of services branding by adopting a sound, detailed and theoretically informed research approach. In this regard, the overarching aim of this research is:

i) To develop a scale to measure service brand identity. Within this overarching aim there are sub-aims:

    - To understand and identify key dimensions that constitute service brand identity

    - To measure each dimension and understand how these dimensions collectively and individually contribute towards the measurement of service brand identity

ii) To apply the brand identity scale to assess the relationship between service brand identity and brand trust and brand loyalty.

This chapter is divided into four sections. Section I discusses the research design for the thesis and considers various issues and decisions related with the adoption of this design. Section II details all the steps involved in the scale development process. Section III presents the survey design where various decisions involved in the development of the research instrument are discussed, including the design of the main survey for this research. Section IV presents an overview of the data analysis methods where various techniques for analysing the pilot as well as the main survey are discussed. Finally, a conclusion of the chapter is presented as a prelude to discussion of the preliminary and main survey findings in the next chapters.

# Section I: Research Design

## 3.2 Section Introduction

This section presents an overview of the research design and then discusses the decisions involved at each step of conducting this research. Kerlinger & Pedhazur (1973, p.300) suggest that "Research design is the plan, structure, and strategy of investigation conceived so as to obtain answers to research questions and to control variance." In Blaikie's (2000, p.21) words, "Designing social research is the process of making all decisions related to the research project before they are carried out." The importance of designing the research before commencing it lies in the fact that it acts as "a basis for making interpretations from the data" (Labovitz & Hagedorn, 1976, p.55) and it helps to avoid taking any irreversible action (Black, 1999).

Research design allows the researcher to control variance and standardize the proceedings by following a pre-determined outline for carrying out the research. While doing this, the researcher also has the flexibility to go back and make reconsiderations (of particular decisions) and modifications if required (Black, 1999). Hence, a log of events was maintained throughout the stages of carrying out this research in order to allow the evaluation of the research processes involved and to keep track of why certain decisions were made instead of others.

Figure 3 highlights the planning and execution phases of this research. While the planning stage was broadly concerned with determining the research questions, selecting an appropriate research design, developing/designing instruments and selecting appropriate data analysis methods, the execution stage focused on the collection and analysis of the data to answer the research questions and to draw conclusions. This chapter, thus, presents and discusses some of the major decisions related with each of these stages and provides justification for the decisions taken.

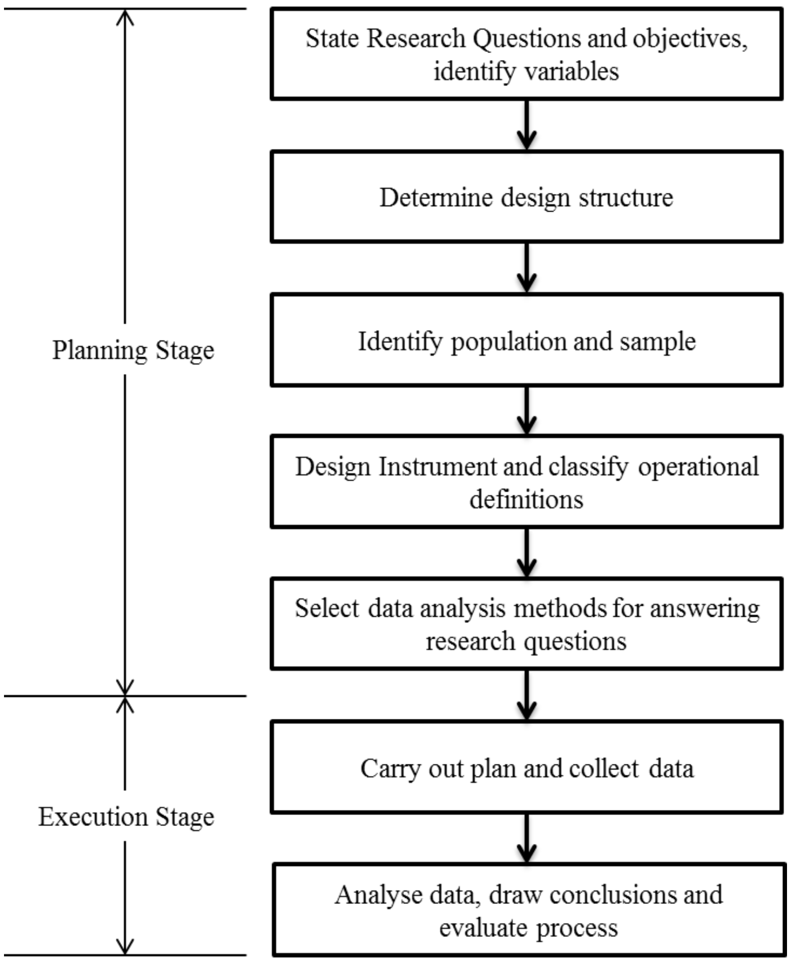


**Figure 3: Stages of designing and carrying out research (Adapted from Black, 1999)**

## 3.3 Problem Statement and Research Questions

This research aims to address the following research problem:

*The lack of understanding of the key dimensions of service brand identity from consumer perspective and an instrument to measure it.*

The above mentioned problem statement resulted in the formulation of research questions that directed the research activities that were to follow. Due to the explorative nature of this study, primarily *'what'* questions were adopted to address the research problem. The research questions are stated below:

RQ1) What is Service Brand Identity and its key dimensions?

RQ2) What are the measures of Service Brand Identity?

RQ3) What is the relationship between service brand identity and brand trust and loyalty?

## 3.4 Design Structure

Since the purpose of this study was to assess the key dimensions of brand identity according to both the literature and consumers, and then to develop and validate a scale to measure brand identity through those dimensions, extant scale development procedures (Churchill, 1979; DeVellis, 2003) were followed. The scale development process provides provision to incorporate both qualitative as well as quantitative approaches at various stages. For example, in this study, a qualitative approach was adopted to explore consumer perspective of brand identity and its dimensions since their perspective is yet unexplored in the literature. The qualitative stage was then supplemented with a quantitative approach for developing the scale to measure the construct. Both approaches were needed to develop and then validate the scale. Thus, a research design that could accommodate both qualitative as well as quantitative phase was deemed necessary for this research.

According to Teddlie & Tashakkori (2009, p.31):

> *"Mixed methods research is the type of research in which a researcher or a team of researchers combine elements of qualitative and quantitative research approaches (e.g. use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the purpose of breadth of understanding or corroboration."*

This research seemed to fit closely with the above definition of Mixed-Methods (MM) research. In addition to this, literature suggested that the studies that aim to develop an instrument to measure certain phenomenon are usually classified as MM studies. This is because the researcher, in such research, collects and analyses both qualitative and quantitative data, mixes the data and reports the study as a single mixed methods study (Creswell & Plano-Clark, 2007). Thus, considering the definition of MM research and the fact that this is a scale (instrument) development study involving a mix of both, qualitative and quantitative techniques, this study was classified as a Mixed-Methods research.

There are several advantages of adopting MM research design. For instance, Mixed-methods research can allow for a better understanding of the research problem at hand as compared to situation when either one of qualitative or quantitative datasets is used (Creswell & Plano-Clark, 2007).

Teddlie & Tashakkori (2009) suggest that using MM can offset the weaknesses that certain methods have by themselves. Mixed-Methods, thus, adds value to the research that a quantitative or qualitative approach alone cannot provide. It is argued that quantitative research does not allow a) voices of participants to be directly heard, and b) discussing researchers' own personal biases and interpretations since the researcher stays in the background (Creswell & Plano-Clark, 2007). A qualitative approach is said to offset these weaknesses. However, on the other hand, qualitative research involves making personal interpretations (that might induce certain biases) and it is not considered to be efficient in generalising findings to a larger population since the number of participants in this type of research is often small (Creswell & Plano-Clark, 2007). A quantitative approach does not have these weaknesses. Thus, researchers argue that if both approaches are combined, the weakness of each approach can be offset.

MM approach provides a 'practical' solution to the research problem since the researcher adopting this approach is free to use any method to address a research problem. In short both numbers and words can be used to solve a research problem. Another major advantage of adopting mixed-methods research is that it enables the researcher to ask both explanatory and confirmatory questions (Teddlie & Tashakkori, 2009, p.33). In other words, it allows researchers to generate and verify theory in the same study. For these reasons, MM research design was deemed appropriate to apply to this research.

### 3.4.1 Rationale for a Mixed-Methods Research Design

Since MM research combines a qualitative and quantitate approach, there are different types of research designs which focus on how such approaches are combined. Broadly, there exist two classifications. First, the research design can lend equal weight to both approaches by using qualitative and quantitative data in a concurrent manner. This is also known as Parallel Mixed Design (Teddlie & Tashakkori, 2009, p.26). Second, Sequential Mixed Design classifies one type of research approach (either qualitative or quantitative) as a primary source of data, which is then extended through the other type of approach. Thus, these two research designs differ on the basis of importance/weight attached to quantitative and qualitative research approaches (Creswell et al., 2008). Since this research involves sequential use of qualitative and quantitative approaches, i.e. quantitative builds on qualitative, it fits closely with the definition of sequential mixed-methods research design and hence from this point forward only issues related with this design will be discussed in detail.

Teddle & Tashakkori (2009) suggest that when adopting a sequential mixed design, the researcher needs to chronologically or sequentially design the use of quantitative and qualitative research approach into two stages. The second stage develops or extends the dataset generated from the first stage. In turn, this requires the researcher to ensure that the phases are linked to and complement each other, in order to arrive at the required dataset.

Within sequential design, there are a further three types of design to choose from – explanatory, exploratory and embedded (Creswell et al., 2008). Exploratory design seemed most appropriate for this research since in such studies quantitative research is built upon qualitative data and findings; which is the case with this study. This is discussed next.

### 3.4.2 Exploratory Sequential Design

Various authors recommend the use of an exploratory sequential design to develop and test an instrument that has not been developed before (Creswell, 1999; Creswell et al., 2004; Creswell & Plano Clark, 2007). This is because a qualitative phase helps in developing and setting the boundaries for the instrument, which can then be empirically validated through a quantitative phase.

The exploratory sequential design has a further two variants: the instrument development model and the taxonomy development model. While researchers use Exploratory – Instrument development model when they need to develop and implement a quantitative instrument based on qualitative findings, the taxonomy model is generally adopted to develop and test an emergent theory using qualitative and quantitative methods. The *instrument development model* seems to fit closely with the aims of this research. This is because the instrument development model is used when the researcher aims to develop and implement a quantitative instrument based on qualitative findings.

When using the Instrument development model, the research topic is first qualitatively explored and then quantitatively validated. For this research, this step was incorporated in two stages of scale development process through interviews and expert panel review which provided a set of qualitative findings which acted as a guide and road-map to develop a list of items. In the second step, quantitative data was collected through an online survey. This data assisted in developing and validating the final scale.

Figure 4 shows mixed method approaches adopted within this research. The dotted line shows the chosen designs for this research.

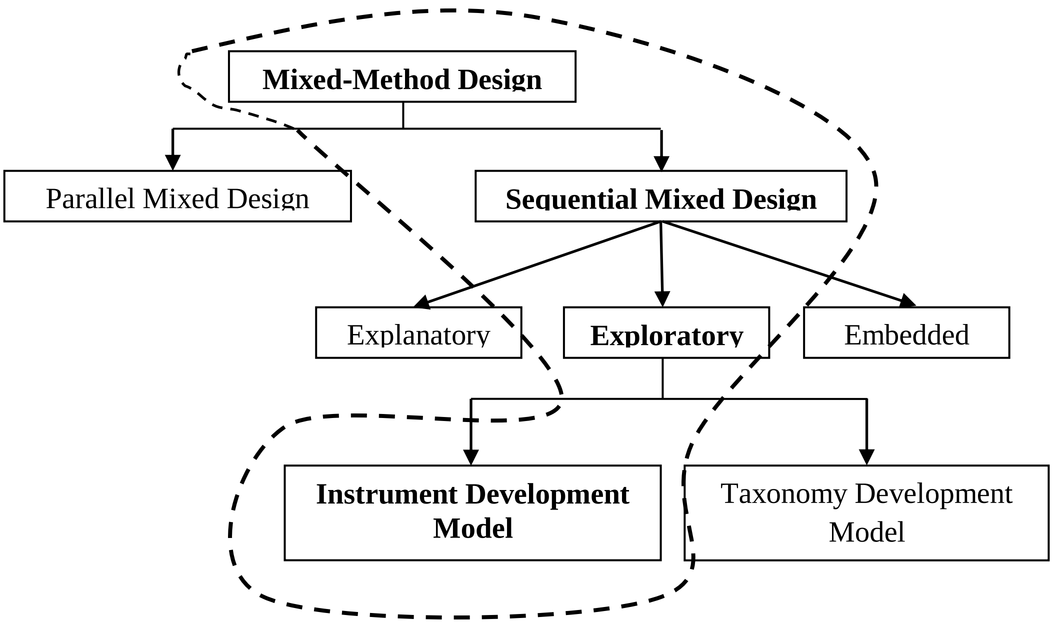


**Figure 4: MM Research Design Decisions**

### 3.4.3 Procedure to Implement the Design

MM research design was implemented across various stages of scale development, as shown in Table 1 below. The mixing of approaches in this research was, thus, achieved by connecting the two approaches by having one (quantitative) building on the other (qualitative) (Creswell & Plano-Clark, 2007, p.7).

The scale development process to develop a valid and reliable scale began with a qualitative exploration of the dimensions of BI. Preliminary dimensions were obtained through literature review. However, since the literature lacked consumer perspective of brand identity and its dimensions and informed little about application of existing BI dimensions to service brands, it was considered necessary to conduct qualitative research to address the gap. Hence, eleven in-depth face-to-face interviews were conducted with consumers to explore BI dimensions from consumer perspective. These interviews generated information regarding consumers' understanding of brand identity and, according to them, what the dimensions of BI were. The transcripts obtained from all the interviews were analysed to determine whether BI dimensions generated through the literature review were similar to or different than those generated from interviews. A systematic comparison revealed that interview data not only confirmed the literature-generated dimensions but also resulted in identification of three new dimensions especially related to services. These dimensions were named brand-as-service process, brand-as-servicescape and brand-as-service experience (see section 4.2, p.132 for more details).

After generating brand identity dimensions, the next step was to generate items through which the dimensions can be measured. These items were worded as per the guidelines suggested by DeVellis (2003) (explained in section 4.3) and were refined further through an expert panel review which again was qualitative in nature. Chapter 4 provides a detailed discussion on item generation and expert panel review along with their results.

The final refined items obtained through expert review developed into a survey to be tested with a wider sample. With this step, this study entered the quantitative phase. In this phase, all the scale items were put in a survey along with additional measures (like brand loyalty, brand trust) hypothesized as being related with Service Brand Identity. The survey was pre-tested with a sample of 106 consumers before administering to the final sample of UK consumers.

### 3.4.4 Challenges Associated with MM Research

While MM approach offers various advantages as discussed, a researcher must always be aware of the challenges associated with adopting this approach, or any other approach for that matter. A researcher must, therefore, plan accordingly and think of ways to overcome challenges in order to make the research more robust. Some of the challenges associated with MM research relates to the amount of time and resources required to collect, analyse and report both qualitative and quantitative data. These challenges were overcome in this research in two ways. First, by ensuring that an appropriate schedule is prepared to carry out the research, highlighting each stage in the scale development process and estimating the time required to complete it. This schedule was followed throughout the research and modified from time-to-time to monitor the progress and accommodate any changes. This way it was ensured that the research is completed within the allocated time period.

Another challenge posed by MM research relates to the skills needed to carry out this type of research since it requires dealing with both, qualitative and quantitative approaches. To overcome this challenge, the researcher engaged in extensive reading to understand and become familiar with both types of research. Various relevant courses and training sessions were taken by the researcher to gain the skill sets to carry out this research.

In addition to this, the researcher also read published journal articles to understand how others have implemented MM designs in their studies. Various books on the subject (e.g. Onwuegbuzie et al., 2010; Leech et al., 2010; Greene, 2008; Teddlie & Yu, 2007 etc.) were also consulted to understand how to design MM research; how to collect, analyse and mix the data; and how to report collective findings. Literature on MM research also advocates the methods highlighted above to gain the skills to undertake such research (Creswell & Plano-Clark, 2007).

**Table 1 Implementation of MM design across stages of SDP**

| Scale Development Stage (SDP) | Purpose | Action | Design |
|---|---|---|---|
| Specify domain of construct | To determine what is to be measured; setting boundaries of what the scale can or cannot measure | Proposed preliminary definition of brand identity<br>Postulated dimensions of brand identity as given in the literature | Qualitative |
| Generate an item pool | To develop a set of items to capture each dimension of brand identity | Generated items from literature<br>Generated items and three additional dimensions from semi-structured interviews;<br>Generated 168 items | Qualitative |
| Refine Items (Initial Item Purification) | To evaluate the clarity, conciseness and readability of each item, thereby establishing face and content validity of items | Stage 1 – Items refined by two independent marketing academic experts; 168 items reduced to 79 items<br>Stage 2 – Items re-refined by same experts; 79 items reduced to 47 items<br>Stage 3 – Items subjected to review by a panel of academic experts within UK and US; 47 items reduced to 35 items | Qualitative |
| Develop and pre-test survey (Pilot Testing) | To conduct an empirical investigation of items to purify them; conduct EFA on pilot data | 35 items put in an online survey administered to a convenience sample of 106 participants;<br><br>Coefficient alpha and inter-item correlations calculated to check internal consistency<br>EFA conducted; items with factor loadings less | Quantitative |

| | | | |
|---|---|---|---|
| | | than 0.60 removed<br>35 items reduced to 29 items for final testing | |
| Administer final survey to wider sample | To develop and validate the final scale | Online survey with 29 items administered to a UK sample of 500 participants; Sample split into calibration and validation sample. Developed scale on calibration sample through EFA and CFA. | Quantitative |
| Cross-Validation of scale | To establish the construct and nomological validity of the scale | Validation sample used for cross validation of the scale. Reliability and validity of the scale established | Quantitative |

## 3.5 Data Analysis and Validity Procedures

Qualitative data (from interviews) were analysed using the techniques of coding, theme development and comparison of (generated) themes to existing literature. This qualitative phase resulted in the identification of a total of eight dimensions of Service Brand Identity – five of which matched with those given in literature and three of which were new dimensions generated through the analysis of interview transcripts. A full discussion of qualitative data analysis is provided in chapter 4 of this thesis.

The quantitative data were analysed with SPSS and AMOS software using various techniques suggested in the scale development literature. These tests were run sequentially, for example, first intial checks were carried out to establish the suitability of the data for factor analysis. This was followed by conducting Exploratory Factor Analysis (EFA) and finally conducting Confirmatory Factor Analysis (CFA) to achieve the final scale. Further, the scale's construct and nomological validity were established. These data analysis techniques are discussed in detail under Section 4 of this chapter.

## 3.6 Section I Summary

The purpose of this section has been to provide an overview of the entire research design and justification on the approach before discussing each stage of the scale development process in detail. This helps to not lose sight of the overall process and how the various stages constitute.

The next section introduces the reader to each step of scale development process in detail and then discusses and highlights the major decisions undertaken under each step along with the justification.

**Table 2: Summary of Main Features of the Research Design**

| **Feature** | **Action Taken** |
|---|---|
| Primary study purpose | To develop and validate a scale for measuring BI |
| Type of Mixed-methods design | Sequential Exploratory Design: Instrumental Development Model (QUAN emphasized) |
| How are the methods mixed? | Qualitative builds to quantitative |
| Quantitative Data Collection | Online questionnaire |
| Qualitative data collection | Eleven in-depth face-to-face interviews |
| Quantitative Data Analysis | Exploratory and Confirmatory Factor analysis |
| Qualitative Data Analysis | Coding, Theme Analysis, compare themes to literature |
| Reasons for collecting both type of data | Quantitative data needed to measure qualitative findings |

## 3.7 Section Introduction

The scale development process in this research has been mainly guided by Churchill's (1979) paradigm, that has been widely used for developing marketing scales, in conjunction with DeVellis's (2003) scale development theory. DeVellis's (2003) work particularly provides guidelines for (i) determining the format for measurement and (ii) enhancing face and content validity of the scale by conducting expert panel review.

Section 3.8 below provides a detailed discussion of each step involved in the scale development process (SDP) that was followed by this research.

## 3.8 Scale Development Process

### 3.8.1 Step 1 Defining the Domain of Construct

The scale development process started with thinking about 'what is to be measured?' This leads the researcher to first define the construct to state exactly what is included in the definition and what is excluded (Churchill, 1979). Having a clear idea of the construct to be measured allows the researcher to think clearly about the content of the scale (DeVellis, 2003, p.60). For this research, the construct to be measured was service brand identity. The literature on brand identity was referred to, to understand how it is defined by existing research. As discussed in Chapter 2, the brand identity literature presents a variety of definitions of this construct. While different authors suggest different definitions of brand identity, most of these definitions share some common elements. After examining previous definitions of brand identity, a number of common themes were observed: BI involves distinguishing the brand (i.e. making it unique), attaching meaning to the brand (i.e. deciding what the brand stands for) and deciding on the attributes that define the brand. Incorporating these views, and as a first step in defining the domain of the construct (service brand identity) (Churchill, 1979), an initial definition of service brand identity was proposed as:

> *"The sum of various factors that define the brand, that give it distinguishable features and make it recognizable."*

Once the construct was defined, the next step was to postulate the dimensionality of the construct. According to Churchill (1979), not only defining the construct is important but also determining how many dimensions it has. He suggests that the most common way to unveil the dimensionality of a construct is through a literature review.

With regards to brand identity, the review of literature indicated that there are several models and theoretical frameworks on brand identity that convey different dimensions (as discussed in Chapter 2). While there were some dimensions that were common (highlighted in more than two studies, e.g. Brand Personality, Brand Communication), there were many others which were unique to one particular study (e.g. Brand experience, Brand promise).

The literature review highlighted that there is a lack of agreement among researchers on what constitutes brand identity. For instance, dimensions such as brand behaviour and brand promise have not been considered by authors like Kapferer (2000) and Moorthi (2002). However, these dimensions are considered to be very important by Burman et al. (2009). Similarly, Aaker (1996) has considered 'organization' to be a component, whereas De Chernatony (1999) and Kapferer (2000) have not considered this. A possible reason for such discrepancies may be attributed to the fact that many of these models have not been subjected to empirical testing (Coleman et al., 2011) even when they are more than a decade old. This posed difficulty in identifying dimensions that were parsimonious or unanimously agreed upon by the researchers.

Considering these drawbacks, it was considered judicious to adopt a holistic approach and consider the prominent brand identity models to generate a pool of dimensions. This meant that all the models and their respective dimensions were put together and scrutinized across various qualitative and quantitative phases of the scale development process to establish the key dimensions of brand identity.

A pool of 21 dimensions was thus drawn from seven prominent brand identity frameworks, viz. Upshaw (1995), Aaker (1996), De Chernatony (1999), Kapferer (1997), Moorthi (2002), Ghodeshwar (2008), Burman et al. (2009). These models were chosen as they are highly referenced in the academic literature. Two tables were then prepared – one containing all the 21 dimensions and the other containing definition of each of these dimensions. Table 3 presents a list of all the dimensions/components that were identified from the existing brand identity models. Table 4 provides definition and/or explanation of each of these 21 dimensions according to their corresponding authors.

A closer examination of the definitions of these brand identity dimensions revealed that there were superficial differences in the terminology adopted to name the dimensions. Thus, the possibility of having redundancies in this pool was raised. In other words, there was a possibility that two dimensions were given different names whilst sharing the same underlying meaning. Therefore, it was necessary to systematically examine all the dimensions in this respect and remove or combine any superfluous dimensions. A qualitative phase was thus designed to help in clarifying the conceptual domain of these dimensions. As a result, two independent marketing academic experts were asked to examine this pool of dimensions to highlight any redundancies and put similar meaning dimensions under broader themes that conveyed the core of these dimensions.

The experts were provided with the definition/description, of each of the dimensions (refer to Table 4), to assist in grouping dimensions that share similar meaning under one broader category. Both experts agreed on most of the dimensions and any differences were sorted out through further discussions and mutual agreement. This exercise resulted in five broad dimensions of brand identity which were named: Brand-as-Symbol, Brand-as-Product, Brand-as-Organization, Brand-as-service communication and Brand-as-Person. The description for each of these five dimensions is provided in Table 5. Thus, through literature review, brand identity was conceptualized as a multidimensional construct consisting of five dimensions.

**Table 3: Dimensions/components of academic brand identity models**

| Dimensions of Brand Identity | Upshaw (1995) | Aaker (1996) | Chernatony (1999) | Moorthi (2002) | Kapferer (1997) | Ghodesahwar (2008) | Burmann et al. (2009) |
|---|---|---|---|---|---|---|---|
| Brand as person | | ✓ | | ✓ | | | |
| Brand as organization | | ✓ | | ✓ | | | |
| Brand as symbol | | ✓ | | ✓ | | | |
| Brand as product | | ✓ | | ✓ | | | |
| Brand as process | | | | ✓ | | | |
| Physique | | | | | ✓ | | |
| Personality | ✓ | | ✓ | | ✓ | | |
| Culture | | | ✓ | | ✓ | | |
| Relationship | | | ✓ | | ✓ | | |
| Self-image | | | | | ✓ | | |
| Reflection | | | | | ✓ | | |
| Vision | | | ✓ | | | | |
| Positioning | ✓ | | ✓ | | | ✓ | |
| Presentation | | | ✓ | | | | |
| Communication | ✓ | | | | | ✓ | |
| Performance | | | | | | ✓ | |
| Brand promise | | | | | | | ✓ |
| Brand behaviour | | | | | | | ✓ |
| Brand expectations | | | | | | | ✓ |
| Brand experience | | | | | | | ✓ |
| Name and Logo | ✓ | | | | | | |

**Table 4: Definition of Brand Identity Dimensions**

| **Dimensions/components of academic brand identity frameworks** | **Definition/Explanation[1]** |
|---|---|
| Brand as Person | Aaker (1996) relates the brand-as-person perspective with brand personality and suggests that a brand can be treated like a person who is competent, trustworthy, fun, active, humorous, casual or intellectual. The brand's personality can serve as a basis for a relationship between the customer and the brand. |
| Brand-as-organization | Brand-as-organization perspective pays attention to the attributes of the organization like innovation, drive for quality, and concern for the environment, created by the people, culture, values, and programs of the company (Aaker, 1996, p.82). |
| Brand-as-symbol | Aaker (1996) contends that a strong symbol can provide cohesion and structure to an identity and make it much easier to gain recognition and recall. He primarily discusses three types of symbols, namely, visual imagery, metaphors and brand heritage. The author notes that visual imagery can include symbols that are powerful and memorable (e.g. Nike's swoosh), whereas metaphors provide more meaning to the symbols, for example, the energizer bunny for long battery life |
| Brand-as-product | Under this perspective, Aaker (1996) addresses six dimensions namely product scope, product attributes, quality/value, uses, users and country of origin. He further suggests that these attributes are an important part of brand identity since they are directly related to the brand choice decisions and the user experience. |

[1] Most of these explanations have not been paraphrased and are author's own words as mentioned in their paper/book. This has been done to prevent any change in meaning due to paraphrasing. Where this is the case, proper referencing has been done (i.e. page number indicated)

| | |
|---|---|
| Brand-as-process | The author (Moorthi, 2002) has not explained this dimension in detail. The only explanation available in the paper is: “Process dimension has been highlighted separately as brand-as-process. This is because the customer is intimately involved in the process of delivery of the services (Lovelock, 1992)” so it only applies to services |
| Physique | Physique is made up of a combination of either salient objective features or emerging ones. The first step in developing a brand is to define its physical aspect: what is it concretely? What does it do? What does it look like? (Kapferer, 2000, p.99-100) |
| Personality | It is the set of external qualities of each brand, its public face, which is a direct extension of its positioning. The strategic personality is the brand brought to life, its way of relating to current and future customers on their own plane, providing the attractiveness and emotional linkage that cements relationships with them. (Upshaw, 1995, p.23-24)<br>The way in which a brand speaks of its products or services shows what kind of person it would be if it were human. (Kapferer, 2000, p.101) |
| Culture | Culture means the set of values feeding the brand’s inspiration. The culture facet refers to the basic principles governing the brand in its outward signs. Culture is what links the brand to the firm. (Kapferer, 2000, p.101)<br>Brand culture can be appreciated in terms of the visible artefacts, employees' and managers' values and the mental models of those involved in brand building activities. (De Chernatony, 1999, p.167) |
| Relationship | “A brand is a relationship.” Example: Nike bears a Greek name that relates it to specific cultural values, to the Olympic Games and to the glorification of the human body. (Kapferer, 2000, p.103)<br>The brand, through the staff, is an active participant in any relationship. Managers need to work with staff to enable them to recognise, from their core values, what types of relationships are appropriate between employees and other employees, between employees and customers and between employees and other stakeholders. (Chernatony, 1999, p.169) focus on employee relations between them and with others<br>Vision and culture are also responsible for the evolution of relationships between employees, consumers and other |

| | |
|---|---|
| | stakeholders. (Nandan, 2005) |
| Reflection | Customer's reflection – "the customer should be reflected as he/she wishes to be seen as a result of using a brand. A brand always tends to build a reflection or an image of the buyer or user which it seems to be addressing. (Kapferer 2000, p.103) |
| Self-Image | A brand speaks to our self-image. If reflection is the target's outward mirror, self-image is the target's own internal mirror. Through our attitude towards certain brands, we indeed develop a certain type of inner relationship with ourselves. (Kapferer, 2000, p.104) |
| Vision | To thrive, a brand needs a clear vision giving a well-defined sense of direction. Managers need to envisage the brand's environment at least five years ahead. (De Chernatony, 1999)<br>Brand vision embodies the core purpose for a brand's existence (Nandan, 2005). |
| (Brand) Positioning | Brand Positioning is the strategic genesis of the marketing mix. A brand is positioned by consumers in their own lives based on their own perceptions of the brand, including how it performs compared to other brands and other purchase alternatives that compete for their affections. (Upshaw, 1995, p.23)<br>Positioning is related with creating the perception of a brand in the customer's mind and of achieving differentiation that it stands apart from competitors' brands/offerings and that i.e. meets customer's needs/expectations. (Ghodeshwar, 2008, p.6)<br>(Exact definition not mentioned in the paper) Consider the intended positioning's suitability against the vision and core values. Positioning is reinforced through artefacts, which gives stakeholders cues about the brand's performance characteristics. (De Chernatony, 1999, p.168)<br>A brand's positioning seeks to emphasize the characteristics and attributes that make it unique. It seeks to convey to consumers the benefits that are being offered. (Nandan, 2005) |
| Brand Presentation | Considering how the brand's identity can be presented to appeal to stakeholders' aspired characteristics (De Chernatony, 1999, p.169 cf Kapferer's (1997) reflections) |

| | |
|---|---|
| Communication | Successful brands are built through creative repetition of themes in various types of media. It is necessary to develop and implement long-term integrated communication strategies demonstrating the brand's value to the target customers. The message should be consistent with the brand value, brand personality and other brand identity dimensions. (Ghodeshwar, 200b. p.7) |
| Performance | Companies should track the brand's progress as to how their brands are doing in the marketplace, and what impact certain market interventions will have on the brand equity (Ghodeshwar, 2008, p.6) |
| Brand Promise | Brand promise is the condensed core of the brand identity. The brand promise determines partly or fully the brand expectations on the side of external target groups. (Burmann et al., 2009, p.116) |
| Brand behaviour | Relates to the behaviour of the employees. Employees should keep the brand promise through consistent behaviour at all brand touch points to ensure that the brand experience of external target groups is in line with their brand expectations (Burmann et al., 2009, p.116) |
| Brand name and logo | "Names and logos are part of the mortar that bonds together the bricks of a brand's identity. They are the most frequently sent or heard facets of a brand" (Upshaw, 1995, p.22) |

**Table 5: Five broad dimensions of brand identity identified from the literature**

| Dimension | Description |
|---|---|
| Brand-as-Symbol | This dimension encapsulates elements that deal with outer appearance of a brand, its name, logo, symbol, slogan, packaging, presentation and metaphors |
| Brand-as-Product | This dimension includes product related aspects that can contribute to building of a brand identity, for e.g. product attributes, quality, uses and users, nationality, product/service design, value added services and user-friendly features |
| Brand-as-Organization | This dimension deals with organization related aspects that can contribute in building brand identity, like innovation, vision, company culture, social responsibility initiatives, and values |
| Brand-as-Service Communication | This includes aspects like positioning, advertising, celebrity endorsement, promotion, and peer influence |
| Brand-as-Person | This aspect relates to the personality of a brand and relationship with it |

### Exploring further dimensions of 'service' brand identity

The discussion under Section 2.3 of this thesis had established that the current brand identity literature has not been sensitive towards the services context and there is a need to adapt the current brand identity conceptualisation to suit better to service brands. Thus, the applicability of the literature-proposed dimensions (Table 5) to service brands might be limited and additional service-specific dimensions may be relevant or occupy a higher importance in case of service brands.

Also, considering the important role of the consumer in services, the existing brand identity models and frameworks have not taken into account consumer perspective of brand identity and hence the five dimensions identified from the literature (refer to Table 5) might not reflect their perspective.

Since this research considers ‘service brand identity’ as a managerial as well as consumer construct, the dimensions drawn only from the literature would not justify the holistic approach adopted by this research. Thus, for these reasons, it was deemed necessary to consult consumers and investigate their understanding of service brand identity – that is to ask them about their understanding and opinion of service brand identity and its dimensions. Guided by this objective, the next step was to consider methods of collecting such data from consumers.

The main purpose of conducting the interviews was to uncover the facets of brand identity that have not been highlighted in the literature and that captures consumer perspective on brand identity. Specifically, the views of consumers were investigated regarding their understanding of brand identity, what, according to them, are the dimensions of brand identity, and whether they consider brand identity to be different for products vs service brands.

Qualitative interviews were considered best for exploring the understanding of consumers (Arksey & Knight, 1999, p.34). Face-to-face semi-structured interviews were chosen as a means to ask open-ended questions.

Since descriptive responses were needed, open-ended questions were deemed suitable for the purpose. This is because open-ended responses permit one to understand the world as seen by the respondents (Patton, 1990, p.24). Thus, consumer responses to open-ended questions like ‘What do you understand by the term ‘brand identity?’ and ‘What could be the sources of brand identity for service brands?’ etc. were gathered, that enabled to capture consumers’ views without any predetermination of those views. This approach is consistent with Patton's (1990) suggestions. Thus, open ended questions were chosen mainly to allow consumers to express what they think, feel, observe or understand about service brand identity. Interviews were chosen over focus groups for several reasons.

First, interviews act as a personalized mode of communication between the interviewer and the respondent at a place deemed suitable for the respondent (Miller, 1991). This helped in establishing a conductive environment to facilitate the discussion of the research questions in an informal manner (ibid). Second, the use of qualitative interviews helped in exploring the concept of brand identity by providing greater depth and developing the construct by understanding consumer viewpoint on brand identity (Mason 2002).

While focus groups also tend to provide information on individual motivations, in comparison with interviews, Hakim (2000) argues that focus groups are more geared towards developing an understanding of a collective discussion on how the respondents agree/disagree on their perspective about a subject matter. This may affect (bias) the individual's response. For instance, an individual's response may be lost in how he/she personally feels about a topic over what he/she thinks the group may agree on. Also, after hearing the views of other members in the group, the individual's perspective and beliefs may be modified and the opinions voiced during the focus group are a manifestation of the group's discussion and viewpoints of other people (Bryman, 2008). Furthermore, focus groups may result in providing a biased view since the group may be comprised of a strong group of people who like to voice their opinions. The presence of a strong group may prevent other individuals who are shy or self-conscious in expressing their views, creating a bias in the dataset (Malhotra & Birks, 2006). Interviews help in providing a deep insight into the research question by concentrating on a key issue and discussing it in more detail whereas the outcome of focus groups may be reliant on the knowledge of a few key/active respondents (Malhotra & Birks, 2006). Due to these fundamental differences, interviews were chosen over focus groups.

**The Interview Process**

An interview can be defined as a method of data collection which involves a discussion between the interviewer and the respondent centered on unfolding the participant's perspective towards the construct of interest (Rossman & Marshall, 1989).

Accordingly, eleven face-to-face in-depth interviews (2 pilot and 9 principal) were conducted with post-graduate students (all doing PhD) from the University of Edinburgh. The main purpose of these depth interviews was to seek participants' view about the dimensions that can contribute towards the development of services brand identity.

The key limitation of using PhD student sample was that it might not able to capture views of the other demographic groups. This sample can be considered as a very focused sample of bright business students, who have a particular set of knowledge and understanding. However, for this research, the key requirement was that the people who are interviewed should be thoughtful, knowledgeable and should have a global outlook. Furthermore, the student sample was used at the initial stages of this research and not for the main sample. Thus, efforts were made to lower the impact of the above stated limitation by interviewing PhD students who come from different countries. For example, the students who were interviewed came from countries like Greece, China, Pakistan, Thailand, US, Germany etc. Moreover, other scale development studies have also used student sample at various stages of their research (e.g. Harjit et al. 2014 (pilot testing stage); Yoo and Donthu, 2001 (item generation and pilot testing stage); Blankson and Kalafatis, 2004 (item generation stage)). Therefore, based on these criteria, the sample seemed to fit for the purpose of this research.

The interview data was transcribed on word-by-word basis and theme analysis was conducted to generate an initial list of dimensions from the transcribed data. After generating an initial list of suggested service brand identity dimensions from each transcript, there were compared them with the literature-generated dimensions.

The interview results not only confirmed the literature-generated dimensions (that were presented in Table 5) but also suggested three ‘new’ dimensions particularly relevant for service brands. These ‘new’ dimensions were not conceptualized theoretically or empirically in prior literature in relation to brand identity dimensions; although they have been identified within the services literature as key to services marketing (Lovelock & Wright, 2002; Bitner, 1992). For instance, various participants felt that service staff can have an impact on service brand identity especially based on their behaviour, appearance and training to serve the customers. Also, they highlighted the importance of servicescape in contributing to building of brand identity.

Therefore, together, the literature review and interview results suggested that service brand identity comprises of eight dimensions. A detailed analysis of data collected from interviews is provided separately in Chapter 4 under section 4.2. Chapter 4 also details the results obtained from interview data analysis.

### 3.8.2 Step 2 Generate an Item Pool

The process of item generation involved developing a set of items that would capture each dimension of the construct (Churchill, 1979). 168 items were generated (please see Appendix B, Table 43) by careful consideration of the literature as well as on the basis of the interview results (Yoo & Donthu, 2001). The process of item generation and criteria that guided this process is discussed separately under section 4.3, page.151.

### 3.8.3 Step 3 Initial Item Purification

The process of item purification (reduction) was subjected to a three-stage purification method. The main aim of this step was to review and refine each of the generated scale items and assess their face and content validity. This was achieved with the help of academic as well as marketing experts who served as judges for evaluating the items. The experts were selected based on their research expertise (particularly in services marketing and/or psychometrics) and based on their education – each expert had a PhD in Marketing.

In stages one and two, the scale items were subjected to review by two independent marketing academic experts who reduced these 168 items to 79 items and then to 47 items based on redundancy, clarity, conciseness and readability (DeVellis, 2003; Furr, 2011). In stage three, these 47 items were subjected to evaluation/review by an independent expert panel which comprised of ten renowned academic and managerial experts from the US and the UK. Based on this expert panel review the 47 items were further reduced to 35-items.

Section 4.4 under Chapter 4 provides a detailed account of the item purification process wherein it discusses each of the three item purification steps in details.

### 3.8.4 Step 4 Develop and Pre-test Survey

After having the items refined through various stages, the 35 items obtained from expert panel review were considered as ready for a survey pre-test. The objective of pre-testing the survey was to test run the survey process and to run some preliminary statistical tests to further refine the items by eliminating those that do not perform well. An online survey was developed using Bristol Online Survey software and was completed by a 106 respondents (44.4% in 20-29 age group; 17.6% in 50-59 age group; 47.2% female). Principal Component Analysis with varimax rotation was conducted on this pilot data which resulted in deletion of six items based on low factor loadings (<0.50) and cross-loadings. This provided the final 29 items to be ready for final testing on on a wider sample (Churchill, 1979).

Further details regarding sampling method used and statistical tests run for analysing pilot data are provided under section 4.4 of Chapter 4 of this thesis.

### 3.8.5 Step 5 Administer Final Survey to Wider Sample

The objective of this step was to collect data from a wider sample to develop and validate the final scale. The final survey consisted of a total of 29 service brand identity items. This survey was administered to a sample of 500 consumers selected to represent the characteristics of the UK population according to age and gender. The data was collected through a Market Research firm named GMI Global. The credibility of this organization was duly verified before hiring it for data collection. The data received from 500 consumers was first manually checked and then refined through various statistical tests which resulted in 491 usable responses. Both, EFA and CFA were conducted to develop and refine the scale and then confirm its structure respectively.

Chapter 5 of this thesis has been dedicated to analysis of data obtained from these 500 respondents. It also provides the results obtained from the analysis of data and the final scale obtained thereafter.

### 3.8.6 Step 6 Cross-Validation of the final scale

This step worked towards establishing scale's construct, discriminant and nomological validity in order to check that the scale is measuring what it is supposed to measure (Churchill, 1979; El-Manstrly & Harrison, 2013). Thus, final service brand identity scale was correlated with brand trust and brand loyalty. The results showed positive and significant relationship between service brand identity and brand trust and brand loyalty. Chapter 5 explains what construct, discriminant and nomological validity is and provides details about how the reliability and validity of the final scale was established.

## 3.9 Section II Summary

The purpose of this section has been to define the process and demonstrate the robustness of the scale development process used. The next section provides further details on survey development and the process undertaken to develop the online survey as the main data gathering tool.

# Section III: Data Collection

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## 3.10 Section Introduction

The final data was collected through an online survey conducted on a wider sample of 500 respondents to validate and establish the final scale. The data from this sample was collected using an online survey. This section outlines the key components of survey design incorporated in this research to gather the required data. It is mainly informed by various scale development studies and survey research literature. It begins by providing a rationale for choosing an online survey for this research, followed by detailing various features of the survey structure.

## 3.11 Survey Design

### 3.11.1 Rationale for Online Survey

In line with Churchill (1979), Walsh & Beatty (2007), Colwell et al. (2008), and Yoo & Donthu (2001), the collection of data for developing the final scale involves conducting a survey. A researcher can choose from various types of surveys, for example, postal surveys, telephone interview, face-to-face interview, or online survey, depending on particular requirements for their study (Sue & Ritter, 2012). Generally, it has been observed that scale development studies require large number of responses (ranging from 200-600; for example, see

Colwell et al. (2008), Walsh & Beatty (2007), Blankson (2008), Delgado-Ballester et al. (2003), Blankson & Kalafatis (2004)). Online surveys are considered to enjoy the advantage of having fast and wide reach as compared to other options (Sue & Ritter, 2012). In addition to this, online survey tends to minimize chances of the respondents providing socially desired responses since there is no personal contact between the researcher and the respondent; respondents feel safer in providing honest answers in online surveys without fearing to lose their anonymity (Sue & Ritter, 2012). Thus, an online survey was conducted to collect data for this research. As discussed in Chapter 3, the data was gathered using Qualtrics Survey software that allows transferring data directly to an SPSS file. Thus, to avoid any coding errors (Argyrous, 2005), the collected data was converted into an SPSS data file directly from the survey software to begin analysis.

### 3.11.2 Survey Structure

An online self-administered survey was conducted to collect the data for scale construction (survey questions provided in Appendix E). The purpose of the survey was to collect two types of information: basic and classification (Churchill & Iacobucci, 2002). The questions formulated to collect basic information covered the main subject of the study (factors that contribute in building brand identity), whereas questions designed to collect classification information focussed on gathering demographic and socioeconomic data (Churchill & Iacobucci, 2002). The sequence of these two types of questions was decided based on Churchill & Iacobucci's (2002, p.346) suggestion, "The proper questionnaire sequence is to present questions securing basic information first and those seeking classification information last."

The survey was divided into four sections with one page dedicated to each one of these. The first section included a welcome note for the respondents. This page provided some background information to the respondents regarding what the survey is about. It was ensured that the two most important terms used throughout the survey as well as in this research, namely, service brands and brand identity, were clearly explained to the respondent. This is because it was important for respondents to understand and be aware of the meaning of brand identity as well as service brands. The meaning was explained in a very simple and layman language (without the use of marketing jargons) to ensure that it does not induce any kind of bias in their mind.

Further, information regarding approximate survey completion time was also included in this section to signal the amount of respondent time required and, thereby, to motivate the respondents to fill the survey. The survey completion time was estimated based on the pilot testing conducted before launching the final survey. This page also included a declaration that the responses will be treated anonymously and will be used only for the purpose of this research. The last sentence on this page asked for respondents' informed consent to proceed further with the survey by ticking the box provided.

The second section of the survey was devoted to questions that were related to the main subject of the study i.e. basic questions. Some broad information about the content of questions was provided to the respondents to introduce them to the questions and to provide clear understanding of how to provide their response. Including such information at the beginning of the survey can also assist in minimizing respondents' fear regarding complexity of the questions. Some broad instructions were provided to answer the questions. This was followed by five questions related to service brand identity items as well as some items related to the constructs brand loyalty and brand trust. The rationale for including items on the latter constructs is based on the nomological validity of the scale and will be discussed later in section 3.11.8.

The third section of the survey included six classification questions to seek general background information about the respondents. The purpose of including these questions in the survey was twofold: to check for sample representativeness against key demographic variables and for classification purposes.

Lastly, the fourth section of the survey was kept to be very short and had only a sentence on thanking the respondents for completing the survey.

The following section further discusses in detail, the content and issues related to the *basic questions* that were included in the survey. This discussion is followed by a discussion on the rationale for including *classification questions*.

### 3.11.3 Basic Questions

There were five sections in the survey. Each of the 35 brand identity item statement was considered as one question. The first section of the survey asked the respondent to choose a service category and then think of a favourite service brand in that category. The respondents were given four service categories to choose from (this is further discussed in section 3.11.7). Space was provided for respondents to mention the name of their chosen service brand. The next section asked the respondents to rate the brand identity items on given response options (7-point Likert scale). The brand identity items were randomly shuffled before asking the respondents to rate them and were not grouped under dimensions. The rationale for this was so as to reduce pattern response (Brace, 2006).

The next two sections included questions related to brand trust and loyalty constructs (see section for more details 3.11.8). These sections followed a similar pattern in terms of the chosen response format for answering the questions. This was done in line with Fowler's (1993) suggestion that "the question forms in a self-administered questionnaire should be few in number (p.100)." The author further suggests that doing so leads to less confusion to the respondent and makes the task of filling out the questionnaire easier for them. Thus, all the questions, except the one that asked for service category were designed to follow the same response format (a rating scale, discussed in the next sections).

### 3.11.4 Survey Response Format

A scale's response format refers to the broad format in which the item statements are presented to the respondents (Furr, 2011) and responses captured through an appropriate method. This study adopts the widely used Likert scale that is used in instruments measuring beliefs and attitudes of respondents (DeVellis, 2003). Respondents were asked to read the item's text (a statement, such as "The advertising of brand X") and suggest whether they agree/disagree that it contributes to the development of brand identity by choosing one of the seven response options provided (ranging from strongly disagree (1) to strongly agree (7)). The questions that required the respondents to rate the items (in the form of statements) were presented in a matrix like structure with rows showing the scale items to be rated and columns showing the response options.

### 3.11.5 Number of response options

The decision regarding number of scale points to include was primarily guided by Krosnick & Fabringer's (1997) research. The authors suggest that a scale with 5 to 7 points appears to be more reliable and valid than a scale with shorter than 5 and longer than 7 points. Hence, scale length of 5 to 7 points can be considered as optimal. However, a 7 point response options scale were considered to be most suitable for various reasons. First and foremost, research suggests that the cross-sectional reliability is greatest for scales with approximately 7 points (Krosnick & Fabringer, 1997). Second, a 7 point response option scale allows for finer gradations (Furr, 2011) that can assist the researcher to capture the difference in the degree of agreement/disagreement among individual attitudes across the cross-section (Krosnick & Fabringer, 1997; Furr, 2011). Thus, it is common practice for researchers to use longer scales to get an optimum balance between fine-gradation, psychometric quality and subtlety (Furr, 2011). This is in line with several scale development studies in the marketing discipline (for e.g. see Blankson 2008; Parasuraman et al., 1988; Blankson & Kalafatis, 2004; El-Manstrly & Harrison, 2013). Hence, the decision to use a 7 point Likert scale was guided by the above mentioned reasons.

**Table 5(a) Description of studies using 7-point likert scale in surveys**

| Reference | Study/survey description |
|---|---|
| Blankson 2008 | Scale development and validation study. Develops a scale that measures college students' choice criteria of credit cards |
| Parasuraman et al., 1988 | Develops a 22-item scale that measures customer perceptions of service quality in retail and service organizations |
| Blankson & Kalafatis, 2004 | Scale development study; develops and validates a scale measuring consumer/customer based generic typology of positioning strategies |
| El-Manstrly & Harrison, 2013 | Develops and validates service loyalty scale |

### 3.11.6 Labels for response options

After deciding the number of response options, the next decision was regarding labelling of response options. A researcher can choose to label end-points only, end-points and mid-point only or all the response options. Since research supports fully labelled response options (Furr, 2011), it was decided to adopt this approach.

This helps in ensuring psychometric quality (Furr, 2011), improves data quality (Krosnick & Fabringer, 1997) and provides better reliability than numeric scales (Sue & Ritter, 2012, p.65). In addition to this, fully labelled scale points assist respondents in understanding the meaning of each scale point thereby avoiding respondent misinterpretation of scale definitions (DeVellis, 2003). Moreover, fully labelled scales are considered to be more reliable and valid measurement instruments than partially labelled ones (Krosnick & Fabringer, 1997, p.150).

The next decision was to choose response labels so that the psychological meaning is clearly differentiated and ensure they represent psychologically-equal differences (Furr, 2011). This is to say that if one is using an agreement scale for example, the difference in agreement between any adjacent pair of responses must be kept to be about the same as it is for any other adjacent pair of response options (DeVellis, 2003). Sue & Ritter (2012) suggest that it is best to use standard scales (that have been used before) when possible rather than creating a custom rating scale. For this reason a standard scale was adopted from DeVellis (2003). These labels were: “strongly disagree,” “moderately disagree,” “mildly disagree,” “neither agree nor disagree,” “mildly agree,” moderately agree,” and “strongly agree.”

DeVellis (2003) further suggests that a neutral mid-point could be added to this scale and labelled “neither agree nor disagree”. Other researchers have also suggested labelling a neutral mid-point (Furr, 2011). However, there is some critique of using mid-points in the response options. According to some researchers (Furr, 2011) participants who are less motivated to respond or who are unable to think carefully about the scale items might choose a mid-point as an easy way to escape a response. This action may lead to less psychologically-informative response and thus, the results may be affected. However, for this research it was particularly important to allow participants who had a truly neutral response to a specific item to be able to indicate so by choosing the mid-point option. On the other hand, forcing respondents to choose to either agree or disagree could affect the reliability and validity of the scale. Therefore, a neutral mid-point was included in the response options.

'No Opinion' and 'don't know' response options were not included in the survey. This is in line with recent research which suggests that inclusion of these options is inadvisable. This is because these choices may capture ambiguous responses that may rather reflect low motivation level to fill out the survey or ambiguity in the question itself (Furr, 2011). Further, each response option was assigned a quantitative value to it, for example 1=strongly disagree, 7=strongly agree, so that these can be "later summed or averaged across all of a person's responses relevant to a given dimension" (Furr, 2011, p.17).

### 3.11.7 Service Categories Included in the Survey

To develop a generalizable scale that functions well in multiple service contexts, four service categories were chosen which were frequently been picked up by consumers during the interviews (Chapter 4, section 4.2 discusses consumer interviews). These were: banking, airlines, hotels and hair salon services. Moreover, these service categories are also suggested by Bitner's (1992) typology to be representing a broad spectrum of service categories. Thus, the first section of the online survey asked respondents to choose any one of these four service categories before proceeding to rate the scale items. This helped in enabling the respondents to relate and understand the meaning of each scale item before rating it on a scale of 1 to 7.

### 3.11.8 Rationale for Including Brand Trust and Brand Loyalty

In assessing the suitability of the scale to measure the construct it is intended to measure, one of the issues of concern is to establish the nomological validity of the scale. Nomological validity is established when a researcher shows that the scale behaves as intended as per the theoretical prediction (Westbrook, 1980). This can be done by selecting the antecedents or consequences of the construct from theory and then using the scale show that it supports the relationship between the construct and its antecedents or consequences (Westbrook, 1980; Churchill, 1979).

Recalling from section 2.3.4 of Chapter 2, brand trust and brand loyalty are considered to be the consequences of brand identity. Thus, section 2.3.4 suggested that as per the theoretical prediction, there is a positive and significant relationship between brand identity and trust and between brand identity and brand loyalty. This thesis, thus, uses the final service brand identity scale (Chapter 5) to test these propositions, thereby, establishing the nomological validity of the scale. Brand trust construct was measured using the scale proposed by Choudhuri & Holbrook (2001) which consisted of four items. Brand Loyalty construct was measured using five items suggested by Brakus et al. (2009). Table 6 presents the items adopted from the literature to measure brand trust and loyalty constructs. These items were also included in the online survey.

### 3.11.9 Classification Questions

Six classification questions were included in the survey. The number and form of these questions were driven mainly by the survey objectives and were subjected to the relevance test suggested by Hague (1993). Collecting such data assists in describing the respondents and in comparing sample characteristics with known population characteristics from census data (Sue & Ritter, 2012, p.69; Hague, 1993).

**Table 6: Brand Trust and loyalty measures**

| Variable | Proposed Relationship | Measures |
|---|---|---|
| Brand Trust | There is a positive and significant relationship between brand identity and trust i.e. a strong brand identity will lead to a higher amount of trust in the brand (Section 2.3.4.2) | a) I trust brand X<br>b) I rely on brand X<br>c) Brand X is an honest brand<br>d) Brand X is safe<br><br>(Source: Choudhuri & Holbrook 2001 JoM; Response format: seven-point ratings of agreement (1 = very strongly dis-agree, 7 = very strongly agree)) |
| Brand Loyalty | A strong and positive association exists between brand identity and brand loyalty (Section 2.3.4.3) | a) In the future, I will be loyal to brand X<br>b) I will buy brand X again<br>c) Brand X will be my first choice in the future<br>d) I will not buy other brands if brand X is available at the store; and<br>e) I will recommend brand X to others<br><br>(Source: Brakus et al. 2009 JoM; Response format: seven-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (7)) |

The survey aimed to collect data from a representative sample in terms of certain known characteristics. Consequently, information regarding respondent’s age, gender, education level, household income and ethnicity was collected. This is consistent with another scale development study in Services Marketing (El-Manstrly & Harrison, 2013). Consistent with Aaker’s (1997) sample selection criteria for developing a brand personality scale, a nonstudent sample was selected for the main sample to enhance external validity as well as generalizability of the brand identity scale.

The application of *relevance test* (Hague, 1993, p.37) to classification questions was done to ensure two things: First, to collect only that information which is necessary to have rather than nice to have; and second, to ensure that the researcher is aware of the reasons for collecting such information and knows what will be done with it (Hague, 1993). When this test was applied to the classification questions included in this survey, all the information was deemed *necessary* to have – this is because in order to validate the sample for being representative of the population and to make comparisons with the larger population the information yielded by those six questions was needed. Nationality was included because this research mainly focuses on the United Kingdom (UK) population and hence it was important to ensure that the respondent belongs to or is resident in the UK.

Thus, it was ensured that only those classification questions were included which were relevant to the survey objectives and were really necessary (Sue & Ritter, 2012; Hague, 1993).

Many researchers advocate placing the classification questions at the end of the questionnaire (e.g. see Churchill & Iacobucci, 2002, p.346; Sue & Ritter, 2012, p.70). Consistent with this, the entire classification questions were placed at the end of the survey with a section introduction – “This section seeks some general background information about you. Please remember that all your answers are confidential.”

# Section IV: Data Analysis Methods

## 3.12 Introduction

Data gathered from the final survey (n=500) was transferred directly to an SPSS file and was analysed using SPSS 21 software. The analysis of data began with 'Data Preparation and assessment' wherein the sample was examined for missing values and various potential biases that might affect the results (e.g. non-response bias, acquiescence bias etc.). Descriptive statistics were also computed, followed by splitting the sample into calibration and validation samples (these are discussed in detail in Chapter 5).

After completing data preparation and assessment, the next step was to conduct *Exploratory Factor Analysis (EFA)* on the data to get the initial factor structure. This was followed by conducting *Confirmatory Factor Analysis (CFA)* to confirm the factor structure. Lastly, *scale cross-validation* was carried out for validating the final scale. This was done by establishing the scale's convergent, discriminant, and nomological validity.

This section focuses on providing a detailed discussion around EFA and CFA. The discussion mainly highlights the rationale for selecting these analyses techniques for developing the scale. It also provides a step by step account of how each of the techniques, EFA and CFA were carried out to achieve the final results (i.e. the service brand identity scale). Thus, in short, this section discusses *the process* of conducting factor analysis (EFA and CFA), whereas the *Data Analysis* chapter (Chapter 5) provides *the outcome*, i.e. the results.

## 3.13 Exploratory Factor Analysis (EFA)

Before applying exploratory factor analysis, the first step, necessarily, was to determine if this technique was appropriate for the problem (Fabrigar et al., 1999; Hair et al., 2006; Child, 2006). Exploratory Factor analysis is a multivariate statistical technique (Williams et al., 2010; Field, 2009; Hair et al., 2006) that is used to determine dimensions or factors underlying a dataset (Foster et al., 2006; Hair et al., 2006; Fabrigar et al., 1999). In other words, EFA is used to evaluate the responses to a set of items used to measure a particular concept and to determine whether these can be grouped together to form an overall index of that concept (Cramer, 2003, p.13). EFA is, thus, a useful technique when the objective of a researcher is to find out whether the items evaluated by respondents through the questionnaire measure a single or multiple construct (or dimensions)? And whether these large numbers of items can be reduced to a smaller number? (Foster et al., 2006; Field, 2009). Often in the marketing discipline, when researchers want to measure latent variables, i.e. variables that cannot be directly measured, EFA is used extensively as a first step in developing a scale (e.g. see Yoo & Donthu's (2001) brand equity scale; Walsh & Beatty's (2007) Corporate Reputation scale; Colwell et al.'s (2008) service convenience scale; Blankson & Kalafatis's (2004) consumer/customer based generic typology of positioning strategy scale etc). Thus, based on these arguments, and considering the objectives of this research, it was deemed appropriate to start the data analysis with EFA to propose a preliminary service brand identity scale (which is then subsequently tested using CFA to confirm its dimensionality). Next section provides more details on CFA. As the name suggests, EFA is an exploratory technique (Williams et al., 2010; Hair et al., 2006), and hence its main aim is "to allow a researcher to explore the main dimensions to generate a theory or model from a relatively large set of latent constructs often represented by a set of items" (Williams et al., 2010, p.3)

For this research, exploratory factor analysis was used to serve three main purposes, which were:

- To reduce the large number of variables (or items as referred to in the questionnaire) to a smaller number,
- To examine the relationship between the set of variables, and
- To detect and assess an early dimensionality of *service brand identity* construct

Following various scholars' recommendations (e.g. Cramer, 2003; Foster et al., 2006; Field, 2009; Hair et al., 2006; Tabachinick & Fidell, 2001 etc.) regarding steps to follow when conducting an EFA, a five step exploratory factor analysis approach was designed for this study which acted as a guide during data analysis phase. This is presented in Figure 5 below:

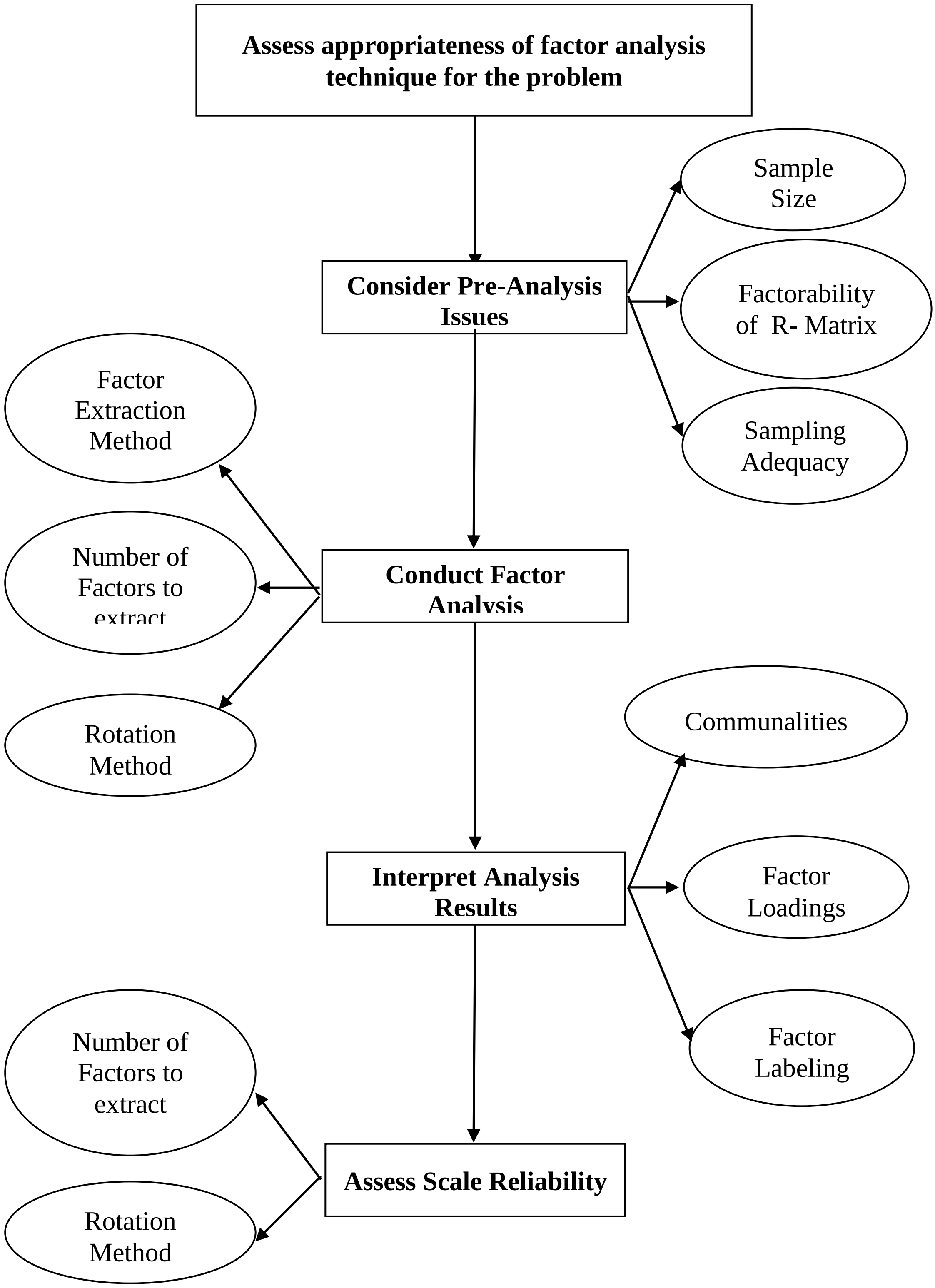


**Figure 5: Steps in Exploratory Factor Analysis**

Each step of this approach (shown in Figure 5) is now discussed in detail.

### Step 1 Check Initial Issues

Before one begins the analysis, researchers recommend checking the appropriateness of the sample size for conducting EFA since the reliability of this analysis is dependent on the size of the sample (Field, 2009). The literature provides various suggestions regarding the suitable sample size for conducting EFA. For example, Hair et al. (2006) states two rules of thumb regarding this: first, the number of observations in a sample must be more than the number of variables and second, the sample should not have fewer than 50 observations. Fabriger et al. (1999) suggests having a sample size of at least 200 under moderate conditions. The generally acceptable rule of thumb regarding sample size is having at least 5 cases per variable in the sample (Child, 2006; Bryman & Cramer 2011; Gorsuch, 1983; Hair et al., 2006).

***Factorability of Correlation Matrix*** – A correlation matrix (also called R-Matrix) is a matrix showing correlations between each pair of variables in the dataset. Before applying factor analysis, all the correlations must be examined to check if any variable has low correlations with many other variables. *Low* correlation is a subjective term and different authors have suggested different criteria to interpret it. For example, Field (2009), Hair et al. (2006) and Tabachinick & Fidell (2001) consider correlations below 0.3 to be *low*, whereas various marketing scholars have considered correlations below 0.2 as low (e.g. Walsh and Beatty, 2007). Thus, although interpreting a *low* correlation is subjective and depends on various factors like sample size, number of variables etc, almost all the researchers agree that variables having low correlations with the majority of other variables must be excluded from further analysis (Williams et al., 2010; Field, 2009; Hair et al., 2006; Churchill, 1979). If, on the other hand, substantial number of correlations are high then it is suggested that the factor analysis can be applied to the data (Hair et al., 2006).

Approaches to ensure the appropriateness of applying the factor analysis to the dataset: apart from examining the correlations matrix, it is advisable to conduct some additional tests to ensure that true factors underlie the data. These tests also enable researchers to feel confident that it is appropriate to apply factor analysis to the data (Hair et al., 2006). In this context, the two tests are: examining the anti-image correlation matrix and investigating measure of sampling adequacy (MSA). Each test is discussed below:

- *Anti-image correlation matrix* – This matrix must be examined to check that most of the values off-diagonal are less than 0.7 (Hair et al. 2006). This matrix contains negative value of the partial correlations. If these partial correlations are low it indicates that the data contains "true" factors whereas if these partial correlations are high then there are no underlying factors in the data (ibid). Thus, high anti-image correlations (>0.70) indicate that the data matrix is not suitable for factor analysis.
- *Measure of Sampling Adequacy (MSA)* – The diagonal values on the anti-image correlation matrix contain measures of sampling adequacy for each variable. These MSA values range from 0 to 1, and must exceed minimum

value of 0.5 to indicate that the sample is adequate for a given pair of variables (Field, 2009). If, however, for any pair of variables, the MSA value fall below 0.5 then those variables can be deleted to achieve the acceptable MSA value (Hair et al., 2006). The literature provides following guidelines to interpret this measure: .80 or above, meritorious; .70 or above, middling; .60 or above, mediocre; .50 or above, miserable; and below .50, unacceptable (Hair et al., 2006).

***Sampling Adequacy Tests*** – After achieving the desired sample size and examining the correlation matrix, the researcher must examine at least two statistics to evaluate the suitability of data for applying factor analysis (Williams et al., 2010; Ferguson & Cox, 1993). The first test is Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (Field, 2009) and Bartlett's test of Sphericity (Hair et al., 2006). The KMO index varies between 0 and 1 (Filed, 2009). The value represented by KMO test represents the ratio of the squared correlation between variables to the squared partial correlation between variables (Hair et al., 2006). Higher values of this test (i.e. values close to 1) would suggest that factor analysis will yield distinct and reliable factors (Hair et al., 2006), whereas values close to 0 or less than 0.5 will suggest that the sample is not adequate for conducting factor analysis (Field, 2009). As a simple guide to researchers for interpreting KMO results, Hutcheson & Sofroniou (1999) considers KMO test values greater than 0.5 as barely acceptable; between 0.5 to 0.7 as mediocre; between 0.7 and 0.8 as good; between 0.8 and 0.9 as great; and above 0.9 as superb.

The second statistical test is the Bartlett's test of Sphericity that tests a null hypothesis that no relationships exist between any of the variables. In doing this, it examines the presence of correlations among the variables in sample. A significant value of the test (i.e. $p<0.05$) suggests that the data has discoverable relationships among variables (Ferguson & Cox, 1993) and that the correlation matrix consists of significant correlations (Hair et al., 2006). However, researchers suggests that this test is dependent on sample size and even if the test is significant, in some cases it might not mean that the correlations are big enough to make the factor analysis meaningful (Field, 2009). Thus, researchers must always examine the correlation matrix to identify and exclude any variables that have low or insignificant correlations with a lot of other variables (ibid).

### Step 2 Conduct Exploratory Factor Analysis

After analyzing the correlation matrix and assessing the suitability and adequacy of the sample, the next step is to conduct factor analysis on the dataset to identify the underlying structure of relationships between the variables. This step involves decision regarding the factor extraction method, number of factors to extract and factor rotation method to apply (Hair et al., 2006).

***Factor Extraction Method* –** The two most widely used factor extraction methods are: Principal Component Analysis (PCA) and Common Factor Analysis (FA) (also known as factor analysis, or principal axis factoring) (Bryman & Cramer, 2011; Foster et al., 2006; Hair et al., 2006). PCA produces components which are often referred to as factors; in fact, researchers suggest that *components* is another term for factors (Cramer, 2003). Thus, consistent with literature (Cramer, 2003; Field, 2009; Foster et al., 2006), and for simplicity purposes, this thesis will use both the terms interchangeably.

PCA gives a factor model in which the factors are based on the total variance (thus, whereas in FA, factors are based only on the common variance, with specific and error variance excluded (Hair et al., 2006, p.102). The issue of which extraction method is more appropriate is highly debated in the literature (Field, 2009), although empirical studies have demonstrated that these two methods reach quite similar results provided that for most variables communalities exceed .60 and the number of variable exceeds 30 (Hair et al., 2006; Velicer & Jackson, 1990).

***Number of Factors to Extract*** – The next step is to decide the number of factors to be retained. There are three main criteria that assist in deciding this: Kaiser's criterion or Latent root criterion, percentage of variance criterion and scree plot.

Kaiser's Criterion suggests that only those factor that have eigenvalues greater than 1 must be considered significant and hence retained for further analysis (Bryman & Cramer, 2011). In doing this, all those factors which have eigenvalue less than 1 are discarded. The rationale behind this is that eigenvalues of 1 or greater represents a substantial amount of variation explained by a factor (Field, 2009, p.640).

Percentage of variance criterion is used when the purpose is to ensure that the extracted factors together explain a specified amount of variance. There are no strict criteria to guide researchers as to what percentage of variance explained is acceptable, however, in social sciences factors accounting for a total variance of 60% or above is considered to be acceptable (Hair et al., 2006).

*Scree Plot* – Catell (1966) proposed a scree test criteria to determine how many factor should be extracted. Scree plot is obtained by plotting each eigenvalue against the factor with which it is associated (Field, 2009). The shape of the resulting curve is used to assess the inflection point at which the slope of line begins to change dramatically (Cramer, 2003; Hair et al., 2006; Field, 2009). All the factors before this inflection point should be extracted (Hair et al., 2006, p.120-22). Although this is a widely used method for deciding the number of factors to extract, researchers offer a point to caution suggesting that factor selection should not be based solely on this criterion (Field, 2009); instead they should use this method in combination with other methods that are discussed above.

***Factor Rotation Method*** – Factor rotation is a technique that facilitates the interpretation of factor solution and clearly discriminates between factors and variables loading onto each (Field, 2009; Cramer, 2003; Bryman & Cramer, 2011). Usually a rotation method is applied after analyzing the un-rotated factor solution if no clear factor structure emerges (e.g. Hair et al., 2006). Thus, a rotational method helps in achieving a simpler and theoretically more meaningful factor solution (Hair et al., 2006). There are two types of rotation methods to choose from: orthogonal or oblique rotation method (Ferguson & Cox, 1993). Orthogonal rotation (e.g. Varimax, Quartimax) assumes independence among factors to achieve a simple factor structure (Ferguson & Cox, 1993), whereas oblique rotations (e.g. Promax, Direct Oblimin) allows factors to correlate with each other (Furr, 2011, p.30). The advantage of using orthogonal rotation is that the factors it provides do not produce redundant information (Bryman & Cramer, 2011). Three major orthogonal approaches are available: quartimax, varimax and equimax. However, varimax is the most commonly used rotation method (Cramer, 2003) as it tends to provide a clearer separation of factors (Hair et al., 2006). In addition to this Varimax method has been a successful analytic approach in obtaining an orthogonally rotated factor solution which is not so with Quartimax or equimax methods (ibid).

### Step 3: Interpreting EFA Results

After selecting the suitable factor extraction method and deciding the number of factors to be retained, the analysis is run to display an un-rotated factor solution. The factor loadings are examined to check if some meaning can be derived from the solution. Apart from this, communalities are also examined to identify variables having low communalities and then to decide whether to eliminate that variable or variables from further analysis. If the un-rotated factor solution is difficult to interpret then a rotation method is applied (as discussed in previous section).

Communalities are the row sum of squared factor loadings and they represent "the total amount of variance an original variable shares with all other variables included in the analysis" (Hair et al., 2006, p.102). It is very important to assess communalities before proceeding with further analysis since a small communality (below 0.5) will suggest that the factors do not account for a large portion of the variable's variance (ibid). IF this is the case, variable(s) with low communalities will be excluded from further analysis. Large communalities, on the other hand, are preferred since they indicate that the factors have extracted a large portion of the variance in a variable (ibid).

Factor Loadings represent the correlation between a variable and a factor. Thus, each factor loading reflects the association between each item and each factor (Furr, 2011). The value of factor loading usually ranges between -1 to +1 and these are also called standardized regression weights in some analysis software (e.g. SPSS AMOS). Variou guidelines are available to determine the significance levels for interpreting factor loadings. For example, Hair et al. (2006) considers loadings of |.5| or greater to be statistically significant, Furr (2011) suggests loadings above 0.40 to be strong and loadings of 0.70 or above as very strong. If the factor loading for a variable or variables is much below the statistically significant level then those variables become candidates for deletion. Also, if a variable has significant loading on more than one factor (called cross-loading) then the factor is rotated to get a clear structure. If the problem of cross loading still persists, then that variable become a candidate for exclusion from further analysis.

*Re-specify the factor model if needed* – After analyzing the factor matrix, several problems might surface. For example, a variable might not have any significant loadings, a variable's communality might be low (below 0.5), and/or a variable might have cross loadings. As discussed above, variable(s) having these problems will be examined carefully and decision will be taken according to the guidelines discussed in the previous paragraphs.

*Label Factors* – This step in EFA involves assigning meaning to each of the derived factors. All the variables under a particular factor are examined to decide the label for that factor which shall accurately reflect its meaning. This process is subjective since it involves intuitively developing the label for a factor. All the factors are, thus, named using this process.

### Step 4: Assess Scale Reliability

All the labeled factors, and variables under each of these, together form a complete scale. The reliability of the scale thus formed needs to be assessed to ensure its appropriateness before proceeding to the confirmatory factor analysis stage. The reliability of the scale can be assessed by calculating Cronbach's alpha for each sub-scale (Parasuraman et al., 1988; Churchill, 1979) and by examining the corrected item-to-total correlations (DeVellis, 2003). Item-to-total correlation values must exceed 0.50 for most of the variables and Cronbach's alpha must exceed the value of 0.70 to be deemed acceptable (Hair et al., 2006).

## 3.14 Confirmatory Factor Analysis (on Calibration Sample)

As discussed in the previous section, the purpose of EFA is to identify the factor structure or model for a set of variables and, thus in that sense it is considered as more of a theory-testing procedure (Stevens, 2009). Confirmatory Factor Analysis (CFA), on the other hand, provides a means to validate the results obtained from EFA and to assess their replicability (Hair et al., 2006). CFA is considered as he most rigorous methodological approaches for testing the validity of factorial structures (Byrne, 2001).

It is important for a researcher conducting factor analysis, to understand the difference between EFA and CFA in order to apply the techniques accurately and to achieve and interpret the results accurately. In EFA the factors are derived from statistical results i.e. the statistical method determines the number of factors and loadings (Hair et al., 2006). On the other hand, in CFA, the number of factors and variables making up those factors are specified *before* running the analysis and thus the role of CFA statistics is to suggest "how well the specification of the factors matches reality (actual data)" (Hair et al., 2006, p.774)

### Steps involved in conducting confirmatory factor analysis (CFA)

### 3.14.1 Developing a measurement model (Model Specification)

The first step in conducting CFA was to develop a hypothesized measurement model using the factor structure obtained from EFA to test its validity (Byrne, 2001). The measurement model was formulated using the AMOS 21.0.0 drawing tool palette. This initial measurement model represented this research's hypothesis about the relationship between variables (Foster et al., 2006). The full description of this measurement model and subsequent ones is provided in the analysis chapter.

### 3.14.2 Model Estimation

Once the measurement model was developed, it was estimated using Maximum Likelihood Method since it is the most common estimation procedure and is fairly robust to violations of non-normality of the data (Hair et al., 2006, p.743). As suggested in the literature, three key sets of parameters were estimated and reported while conducting CFA (Furr, 2011), these were: fit Indices, parameter estimates, and modification indices. Each of these is discussed below:

***Fit Indices*** – These were examined to assess the overall adequacy of the hypothesized measurement model (Furr, 2011). If the results show a 'good' fit then the model is considered as consistent with the observed data and hence adequate, however, if the results suggest a 'bad' fit then the model is considered to be inconsistent with the data and hence inadequate (Furr, 2011).

In this research, three types of fit indices, viz. absolute fit ($\chi^2$ statistic, GFI, AGFI, SRMR and RMSEA), incremental fit indices (CFI, NFI, TLI, RNI) and parsimony fit indices (PGFI, PNFI) were considered to assess the overall adequacy of the hypothesized measurement model (Foster et al., 2006; Hair et al., 2006).

Absolute fit indices measure provide "the most basic assessment of how well a researchers' theory fits the sample data" (Hair et al., 2006, p. 746). Incremental fit indices, on the other hand, "assess how well a specified model fits relative to a null model that assumes all observed variables are uncorrelated." (Hair et al., 2006, p.749). Following Hair et al. (2006) multiple fit indices were used to assess the hypothesized model's goodness-of-fit. Therefore, $\chi^2$ value and the associated df (degree of freedom) were included, three absolute fit indices, two incremental, two goodness-of-fit index, and two badness-of-fit index were included in the analysis. A detailed description related with the indices used to assess model fit is provided in the analysis chapter (Chapter 5).

As the literature suggests, the assessment of fit indices can provide two choices: if they suggest that the model is fit and adequate, then the parameter estimates can be examined to evaluate the psychometric qualities of the model; if however, they indicate that the model is unfit and inadequate, then the modification indices have to be examined to make revisions to the model (Furr, 2011).

***Parameter Estimates*** – this set of results included examining item's factor loadings, the inter-factor associations and error variances (Furr, 2011). The parameter estimates were examined when the hypothesized model was deemed fit by fit indices. In AMOS software, factor loadings are termed as *Standardized Regression Weights*. These loadings were examined to check if there were loadings lower than 0.50 and also to check that all the loadings were between +1 and -1 range (Hair et al., 2006). If not, then those variables were considered as candidates for deletion. However, other results (for example, associated standardized residual value and squared multiple correlations) were also considered before finally removing any variable.

***Modification Indices (MI)*** – As mentioned under 'Fit indices' section, if the values of fit indices indicate an inadequate and poor fit, then modification indices are examined to identify possible revisions that can be made to the hypothesized measurement model to improve its model fit. The size of a modification index is examined to decide whether any changes can or will be made (Furr, 2011). Large MI values for variable(s) indicate that removing those particular variables will improve the model fit. It is common to delete such items from further analysis (Hair et al., 2006). However, any decision to remove a variable was taken after considering other values like standardized regression weights and standardized residual values. In addition to this, deletions were made in consultation with theory as well.

### 3.14.3 Model Re-specification

If any changes are made to the measurement model, for example, any item deleted, then the next step is to re-specify the measurement model. This means running the analysis again and re-estimating the model fit and other parameters to see whether it has achieved acceptable model fit. A model fit is acceptable when the values of various fit indices are within the acceptable levels (benchmark values). Decisions regarding model re-specification were based on three main criteria: standardized regression weights (or estimated loadings), standardized residuals, and modification indices (Hair et al., 2006). A detailed account of model re-specification has been provided in Chapter 5 under section 5.2.

### 3.14.4 Scale Validation and Psychometric Properties

Cross-validation is an important step in scale development research as it establishes whether the final measurement model generalize beyond the sample at hand. Therefore, scale cross-validation is carried out on a validation sample. Cross-validation is recommended when more than two modifications are made to the measurement model, and it involves evaluating the revised model (developed using calibration sample) on a validation sample before drawing any inferences (Furr, 2011, p.102-3). Cross-validation also enables a researcher to reject the concern that modifications were a result of chance characteristics of the sample (MacCallum et al., 1992). Further detailed discussion and outcome of cross-validation is provided in Chapter 5 of this thesis.

The validity of the final measurement model was assessed through construct validity and nomological validity. Construct validity involves establishing discriminant and convergent validity. Explanation of each of these validity types and the process through which these were established has been provided in Chapter 5 of this thesis.

## 3.15 Chapter Conclusion

This chapter discussed the research design and the rationale for undertaking various approaches and decisions to fulfill the objectives of this research. This thesis adopts a mixed-methods research design and integrates it with various stages of the scale development process.  Next, this chapter introduced the scale development procedures followed by this research and discussed the rationale for including each step in this process. Since the scale development process is central to this research, this chapter discussed all the rigorous approaches adopted in constructing a valid and reliable scale for the construct. Further, this chapter also detailed the survey design, i.e. all the procedures and issues involved developing a survey. The data collection as well as analysis methods were discussed along with sampling procedures and rationale for choosing particular service categories.

# CHAPTER 4 PRELIMINARY DATA ANALYSIS

## 4.1 Introduction

This chapter reports on the preliminary research that was conducted at various stages of the scale development process (SDP). The aim was to enrich the conceptualisation of service brand identity, refine the items, and to pre-test the survey before collecting final data. Thus, the preliminary research has provided support to the scale development stages as shown in Table 7.

Chapter 3 provided the rationale for conducting qualitative interviews, expert panel review and pilot testing. This chapter specifically provides further details regarding each of these methods and their results.

This chapter is divided into four main sections. Section 4.2 is dedicated to discussing the interview process and its outcomes. It gathers consumer insights on their understanding of brand identity in general and the potential dimensions of service brand identity. This section contributes to step 1 of the scale development process.

Section 4.3 discusses the item generation stage of the scale development process. It reports on the criteria adopted for generating potential items which would be included in the final scale after going through various item purification stages.

**Table 7: Account of Preliminary Research Conducted Across Stages of SDP**

| SDP Steps | Rationale | Action Taken |
|---|---|---|
| Step 1: Specifying domain of construct ↓ | Gap in the literature regarding consumer perspective | Conducted Consumer interviews |
| Step 2: Item Generation ↓ | To generate items to capture each of the proposed dimensions | Items generated from the literature and consumer interviews |
| Step 3: Item Purification ↓ | To purify scale items generated in step 2 | Stage 1: Item review by independent academic experts<br>Stage 2: Item revision and further item review by independent academic experts<br>Stage 3: Expert Panel review |
| Step 4: Developing and pre-testing Survey ↓ | To further purify scale items from step 3 | Conducted pilot survey on 106 participants |
| Step 5: Administering final survey ↓ | These three steps form part of the main data collection and analyses (Chapter 5) | |
| Step 6: Analysing data and developing the final scale ↓ | | |
| Step 7: Scale Cross Validation | | |

Section 4.4 is dedicated to discussing the expert panel review in detail and communicating its findings. This review was conducted mainly to refine the items generated in the second step of SDP. This section reports how the items were refined based on experts' suggestions. This section corresponds to step 3 of the scale development process.

Section 4.5 discusses the pre-testing of the main survey, the process and its outcomes. The main objective was to empirically refine the items, check whether the questionnaire is understandable by the respondents and to gain further insights on early brand identity dimensionality. This section corresponds to part of step 4 of the scale development process.

## 4.2 Qualitative Interviews

### 4.2.1 Purpose

The main purpose of conducting the interviews was to uncover the facets of brand identity that could further be investigated through quantitative study (later stages of scale development). Specifically, the views of consumers were investigated regarding: a) their understanding of brand identity, b) what, according to them, are the dimensions of brand identity, and c) whether they consider brand identity to be different for products vs service brands.

### 4.2.2 Participants/Sample

Eleven face-to-face open-ended interviews (2 pilot and 9 principal) were conducted to achieve the purpose stated above. Literature suggests that qualitative research does not necessarily require having a large sample size as is the case with quantitative research (Patton, 1990). Therefore, a sample size of 6-8 participants for interviews is enough to justify the results (Miles & Huberman, 1994). Following a convenient sampling approach, post-graduate students (all PhD students) studying at the University of Edinburgh were selected for the interviews. An e-mail was sent to fifteen students stating the aim and objectives of this study and a brief background. The e-mail contained information about what they could expect in the interview and why they had been chosen to be the potential participants. It was ensured that none of the participants was a marketing student to avoid their responses getting biased by prior knowledge of the construct-to-be-measured. Of nine participants, five were males and four were females; age group 25-35 years old and all had been living in the UK for at least 2 years at the time of interview. No incentives were provided to take part in the interviews.

### 4.2.3 Interviewing Process

This study adopted a standardised open-ended interview approach to minimize the variance in the content and sequence of the questions posed to the interviewees. The interview was designed in a manner to address a pre-determined set of questions through a structured approach with only broad areas of discussion outlined by the interviewer (Miller, 1991). Under this approach, an interview guide was prepared with a set of questions arranged in a sequential manner. The interview guide was reviewed by two Marketing academic experts who suggested some modifications that were duly incorporated in the format. The same experts also provided specific guidelines and instruction to the interviewer (the researcher) regarding the interview process. Some literary work (Rubin & Ruben, 2005; Kvale, 2007; Arksey & Knight, 1999) was also referred to, to assist as a guide to the preparation for interviewing.

Further, each interviewee was asked the same set of questions in mostly the same sequence. This helped in standardizing the interview questions as well as the process. In addition to this, it also allowed the researcher to limit the possibility of a bias due to the varying lengths of the interview and depth of responses gained from different people (Patton, 1990). For instance, without a standardized approach, different people may be asked different questions due to which there may be missing entries in the dataset (ibid). Also, one interview may provide an in-depth and detailed response for a particular question while the other may provide a very basic and simple answer. The standardised approach thus helped in simplifying the data analysis procedure since the questions posed to each interviewee had already been organized and it was possible to quickly sift through the respondent's transcript to locate the answers (Patton,1990).

Notwithstanding these advantages, it is also important to understand the weaknesses of adopting a standardised open-ended interview approach. Patton (1990, p.286) states that "this approach does not permit the interviewer to pursue topics or issues that were not anticipated when the interview was written." To address this limitation, the researcher ensured that a rich discussion followed whenever any important issues which were not anticipated came up during the interview. This involved maintaining some level of flexibility in terms of the questions and discussions framed so that the interviewee could freely discuss the phenomenon of interest. However, the primary focus of the interview was maintained throughout by minimizing the scope of divergence.

### 4.2.4 Interview Questions

Opinion-based questions were asked in the interview to gain insights into respondents' understanding of the construct (i.e. service brand identity). This was an exploratory approach to understand the issue of interest. For instance, questions were framed as to what the respondent believes or thinks about or what their opinion is of a particular issue.

After finalizing the questions to be asked, the researcher followed a predetermined order to sequence the questions, as suggested by Patton (1990). To allow the respondent to feel at ease and comfortable, generic questions were posed first that required minimal recall and interpretation. For example, questions like 'What is your favourite brand?' and 'Why do you like this brand?' helped in encouraging the respondents to begin talking and expressing their views. This was followed by more subject-specific questions which were formulated for providing greater detail and motivating the respondent to think and explicitly state their feelings and perceptions.

To ensure high data accuracy and greater focus on discussing the responses, the interviews were recorded. This prevented the researcher from focusing excessively on noting down the responses and allowed to ask follow-up questions to understand the issue at greater detail.

A full interview guide with all the instructions and questions has been provided in Appendix A.

### 4.2.5 Interview Settings

All the interviews were conducted with individuals in a quiet and comfortable room to ensure that the interviewees were not distracted or disturbed by external noises. Generally, interviews last around 45 minutes in order to ensure that respondents do not feel exhausted and devote less attention to the questions (Miller, 1991). However, the actual time span of an interview is moderated by the researcher's data requirement. For this study, the interviews generally lasted between 25–40 minutes. All the interviews were tape-recorded with the consent of interviewees. Before beginning the interview, the following instructions were read out to the interviewees:

- All the questions are open ended, which means you can provide as much detailed information as you want and fully express your viewpoints and experiences.
- The interviewer may ask questions to further clarify some responses.
- If you do not want to answer any question you may let the interviewer know and ask to move on to the next question.
- The interview will be tape-recorded and the interviewer will take notes during the interview. Are you happy with this arrangement?

Each interview process began only after taking the consent of each individual to participate in the interview.

### 4.2.6 Interview Data Management and Analysis

***Data Transcription:*** After completing data collection through interviews, the process of transcribing was started to put collected (and tape-recorded) data into the written form. To analyse each open-ended question, a code guide was developed which helped in collecting and managing the data extracted from the interview (Miller, 1991). The interviews were transcribed verbatim. The data was transcribed by the researcher in order to familiarize herself with the content of the data. During the transcription process, the researcher marked the data that could be a potential insight to the research question.

***Generating Initial codes****:* In the next step, an initial list of dimensions was generated from the data sets that had a recurring pattern. The data was organized in a systematic way and the meaningful parts were recovered from the transcripts in order to begin the process of categorizing the data. The terminology used by participants to suggest the dimensions of brand identity was retained, so as to refer back to the literature and see whether the dimensions they have suggested matches with the ones generated through the literature.

All the transcripts were analysed carefully and following Miles & Huberman's (1994) framework, all the emerging patterns and themes in the data were noted by the researcher. This was followed by drawing links between these themes and patterns with previous literature (mentioned in Chapter 2). This helped the researcher in identifying the categories that were relevant as factors contributing to brand identity development.

### 4.2.7 Findings

This section provides the main findings from the consumer interviews.

#### 4.2.7.1 Consumers' Understanding of Brand Identity

Before asking the participants about the dimensions of brand identity, it was deemed important to know whether consumers understand what brand identity is and whether they share a similar understanding of this concept as that in the literature. Therefore, the participants were asked to explain what they understand by the term ‘brand identity’? The transcript analysis suggests that most of the participants had a fair understanding of this concept. They were aware that brand identity helps in differentiating a brand from other competitor brands. For example:

> *“I think it is a particular thing that makes you different from others* (Male 25-30yrs)” and *“I think it’s just like how it (the brand) stands out from the rest of similar brands* (Male, 25-30yrs)”.

There was also discussion around how consumers try to match their identity with the brand’s identity, for example:

> *“I have a feeling that the brand’s identity will measure the consumers who use it and the consumer try to match their identity with brand identity…so it’s like fun-loving will love to use fun-loving stuffs and find the appropriate* (Male, 25-30yrs).”

Interestingly, some of the participants compared the identity of brands with the identity of individuals through examples of ID cards. For example:

> *“The first thing that comes to my mind is Identity Card. Everyone has ID card showing the name and birthday and nationality so I think it is similar to a brand. The name, clever marketing people tries to choose easy to*

*remember name, not too complex. And the logo and the nationality is also important* (Female, 30-35yrs)."

Participants also highlighted the importance of brand identity suggesting that identity should be the first thing to come to your mind about the brand:

*"I think it's like the first thing that come up to your mind about that brand should be the identity. It can be quality, it can be price, it can be their features, their unique features that other brands don't have* (female, 25-30 years)."

Thus, the interview participants exhibited a fair understanding of what identity means when applied to the branding context. This helped in ensuring that the participants were able to make valuable contribution to further questions related to the dimensions of brand identity, both in a generic as well as a service context.

#### 4.2.7.2 Factors that Contribute to Brand Identity Development (Product Context)

Initially, the participants were asked to discuss and highlight the factors that would contribute to the development of brand identity. While asking this question, they were neither asked to focus on product brands nor on service brands. Therefore, the discussion was not context specific for this question (next question was asked specifically for service brands). Most of the participants mentioned factors like advertising, colour associated with the brand, brand name, positioning, celebrity endorsement etc. as the factors that contribute to brand identity development. Table 8 highlights the key factors that were mentioned during the interviews and the number of times these were mentioned. Most of these factors match with the dimensions of brand identity identified by the current literature, as shown in Table 8. Thus, these findings confirmed that the dimensions mentioned in the literature are also considered to be important and relevant by consumers.

#### 4.2.7.3 Are there are differences between goods and services?

The next question asked consumers that if they were asked to discuss and highlight brand identity dimensions specifically in a service context (i.e. for service brands), would the factors they have mentioned remain the same or would there be any changes to them? All the participants suggested that they would consider other 'service' related factors to be the contributors to brand identity of service brands.

For example, on being asked this question, one of the participants said:

> *"Of course they have some differences, take example, well if we talk about tangible and intangible product like Apple and another is service like Airline, which I thought about…or first thing to come to my mind is Asian and Singapore Airline for which the first thing to come to my mind is the girl and also the comfortable airplane seats* (Female, 25-30yrs)."

**Table 8: BI dimensions generated from the interviews**

| Dimension | No. of times mentioned | Link with the literature |
|---|---|---|
| Communication (Advertisement, celebrity Endorsement, promotion) | 9 | Upshaw, 1995; Ghodeshwar, 2008; da Silveira et al., 2013 |
| Logo Colour | 3 | |
| Culture | 3 | Kapferer, 2000; De Chernatony, 1999 |
| Name | 2 | Aaker, 1996; Upshaw, 1995 |
| Logo | 2 | Aaker, 1996; Upshaw, 1995 |
| History | 2 | Burmann et al., 2009; Aaker, 1996 |
| Positioning | 2 | Upshaw, 1995; De Chernatony, 1999; Nandan, 2005; Ghodeshwar, 2008 |
| Design | 1 | Aaker, 1995 |
| Company leadership | 1 | Aaker, 1996; De Chernatony, 1999; Nandan, 2005 |
| Nationality | 1 | Aaker, 1996 (country of origin) |
| Product functionality | 2 | Aaker, 1996 (product uses) |
| Value Added services | 1 | Aaker, 1996 |
| The look | 1 | Kapferer, 2000 (presentation) |
| Packaging | 1 | Kapferer, 2000 |
| Slogan | 1 | Aaker, 1996 |
| Company philosophy | 1 | Burmann et al., 2009; Aaker, 1996 |
| Social responsibility | 1 | Aaker, 1996 |
| Relationship with the brand | 1 | Kapferer, 2000 |

Another participant hinted at differences between switching behaviour among products vs services:

> *"Normally for service, if I feel comfortable with one brand for example restaurant. The food everything is good I will go there and be very lazy to change it. Maybe once I will try some new but normally just keep going there…Products are more updated than the service, today there comes one product tomorrow there is something new so we want to try. But for services, if you are comfortable with this one I don't think I would want to try a new one*."

On being prompted to discuss the reason for such behaviour, the participant suggested that:

> *"May be like more emotionally bonded with this environment and this particular place. An example is banking. If everything is fine, i.e. they deliver a good service, everything is done for you then you wouldn't switch to other bank. And also for the restaurant - I like one Indian Restaurant. I like to eat there - the food is good, the sound is okay, so I just go there even though there are several restaurants nearby, but I wouldn't try them. Maybe only when friends recommend then I will try something new but if I am alone then I will keep going there (to the Indian restaurant). In banking also it is very unlikely for me to change my bank - only if I am very dissatisfied with their service*."

These examples suggest that consumers might view service and products differently in some aspects. This lends further support to the literature that suggests that services and products are different and hence their marketing tends to be different as well.

#### 4.2.7.4 Factors that Contribute to Brand Identity Development (Service Context)

Next, the interview transcripts were analysed to identify factors that can contribute to the development of service brand identity. A majority of the interview participants suggested that service staff can have an impact on identity of brands especially through their behaviour, appearance and training to serve the customers. For example, regarding the role of service staff in contributing to the development of brand identity, one of the participants said:

> "*I think for services, their identity can be presented through their staff. It's like, if their staff is well trained, are in good manner, and their service sold professionally, I can feel that this is a good brand, this is a premium brand for me*" (female, 25-30yrs). Another participant said, "*I think service staff is really important and whether they make me feel comfortable*" (Male, 25-30 yrs).

In addition to this, some participants highlighted the contribution of the servicescape in building brand identity. For instance, one of the participants (female, 30-35yrs) suggested –

> "*for services what would come to my mind would (be the person who delivers the service and) the environment - how their working environment will be… whether the environment where they deliver to the customer will be comfortable or luxury?*"

A similar view was expressed by another participant (female, 30-35yrs) –

> "*I think the experience when I use that service, for example, like a restaurant, it's not just about the staff, but how the restaurant looks, the*

*atmosphere in the restaurant. Or even an airline, it's like seats in the airline, food in the airline can represent the brand as well."*

Another participant (male 25-30yrs) suggested that:

*"the facilities, the counters should be good – the office which you see represents the whole company. If you see a mess or unqualified service then you think who is actually behind this?*"

Service Experience was also deemed important by the majority of interviewees. One of the participants (female, 30-35yrs) expressed the opinion –

*"I think service brands probably are more related to consumer experience because you cannot touch the product...In other words experience becomes more important."*

Another interviewee (male, 25-30 yrs) highlighted the importance of first-time experience with the service. He said:

*"Another thing is the first time I get the service is really important, and it's like if the first time I get the service is good then I really like that service."*

Table 9 highlights all the key words mentioned by the participants.

**Table 9: Service-related BI dimensions generated from the interviews**

| Brand Identity Dimensions (Service Brands) | No. of times mentioned |
|---|---|
| Staff | 7 |
| training of staff | |
| staff punctuality | |
| People who provide service (staff) | |
| Staff | |
| Friendly staff | |
| Staff behaviour | |
| service staff | |
| Environment | 5 |
| Facilities | |
| Ambience/site | |
| Atmosphere | |
| Service environment | |
| Convenience of location | 3 |
| Location | |
| Convenience | |
| Consumer experience | 3 |
| Service experience | |
| Personal experience | |
| Technology support | 1 |
| Good offers/package | 1 |
| Quality | 1 |
| Credibility | 1 |
| Reliability | 1 |
| Complimentary services | 1 |
| Availability | 1 |
| Personality | 1 |
| Service standardization | 1 |
| Comfort | 1 |
| Reputation | 1 |

Since the interviews generated a number of factors/dimensions (as shown in Table 8 and 9) it was important to identify and understand if any pattern exists and whether two or more factors can be combined together under a broader category to make them more meaningful. Thus, in the next step, the same marketing academic experts, who had categorized the literature-generated dimensions under the broader category, were consulted regarding this issue. They were provided with the initial list of literature generated dimensions (Table 3 and 4 in Chapter 3) and the list of dimensions generated from consumer interviews. Next, the experts (working independently) were asked to assign each dimension generated from the interviews to one of the five literature-generated dimensions. Consequently, a new category was added each time a new dimension was identified which could not be placed under any of the five literature dimensions. The experts were able to assign most of the dimensions shown in Table 8 under one of the five literature-generated dimensions, however, for dimensions shown in Table 9, they had to introduce a new category.

This exercise led to the identification of three new broad categories, namely, servicescape, service experience, and service process. The servicescape category included aspects related to the service environment, facilities, general ambience and atmosphere where the brand is delivered. Service experience included aspects related to the overall experience of the consumer with the service brand, their relationship with the brand and the overall reputation of the service brand. Service process included aspects related to the service staff, technological support, quality, reliability, and standardization of service. Therefore, altogether, after combining brand identity dimensions generated through the literature review and the ones generated through qualitative interviews, a total of eight dimensions of service brand identity were identified.

A brief description of each dimension is given below:

i) Brand-as-Symbol – this dimension encapsulates elements that deal with the outer appearance of a brand, its name, logo, symbol, slogan, packaging, presentation and metaphors

ii) Brand-as-Product – this dimension includes product related aspects that can contribute to building of a brand identity, for e.g. product attributes, quality, uses and users, nationality, product/service design, value added services and user-friendly features

iii) Brand-as-Organization – This dimension deals with organization related aspects that can contribute in building brand identity, like innovation, vision, company culture, social responsibility initiatives, and values

iv) Brand-as-Process – this dimension includes elements related with the service process, like service delivery process, standardisation of services, service staff related aspects (their training, behaviour, appearance), and technological support.

v) Brand-as-Servicescape – this dimension included elements like the service environment, ambience and site, atmosphere, and facilities

vi) Brand-as-Service Experience – This dimension includes elements of consumer experience, and reputation

vii) Brand-as-Service Communication – This includes aspects like positioning, advertising, celebrity endorsement, promotion, and peer influence

viii) Brand-as-Person – This aspects relates to the personality of a brand

### 4.2.8 Section Summary

This section provided a detailed discussion of the interview process and its outcomes. It highlighted that the consumers' share a similar understanding of brand identity to that understood in the literature. Interview findings not only confirmed the validity of the dimensions identified through the literature but also highlighted three additional dimensions particularly relevant for service brands. These dimensions have not been included in the current brand identity literature but have been recognized in the services marketing literature. In this manner, these interview findings provided strength to this research's conceptualisation of service brand identity by allowing the researcher to take into account a holistic view of what service brand identity is and what its components could be, by identifying factors that might be important for building strong identity for service brands. Figure 6 provides a holistic picture of all the dimensions (and their sub-dimensions) identified from the literature and interviews.

## 4.3 Generate an Item Pool

The process of item generation was primarily guided by the purpose of developing the scale, which is in line with DeVellis's (2003) suggestions. Following established scale development procedure (Churchill, 1979; DeVellis, 2003; Furr, 2011) and to ensure generation of a comprehensive list of the scale items, items were generated from both, the interview transcripts as well as from the review of literature. This resulted in generation of a total of 168 items. Appendix B presents a table that lists these 168 items and their corresponding dimension. The items were generated in strict adherence to the established guidelines on item writing (DeVellis, 2003; Furr, 2011) for constructing all the items. This meant that at this stage of scale development process, redundancy among scale items was allowed (Churchill, 1979). Redundancy allows a scale developer to compare similar meaning but differently worded items and express a preference (DeVellis, 2003).

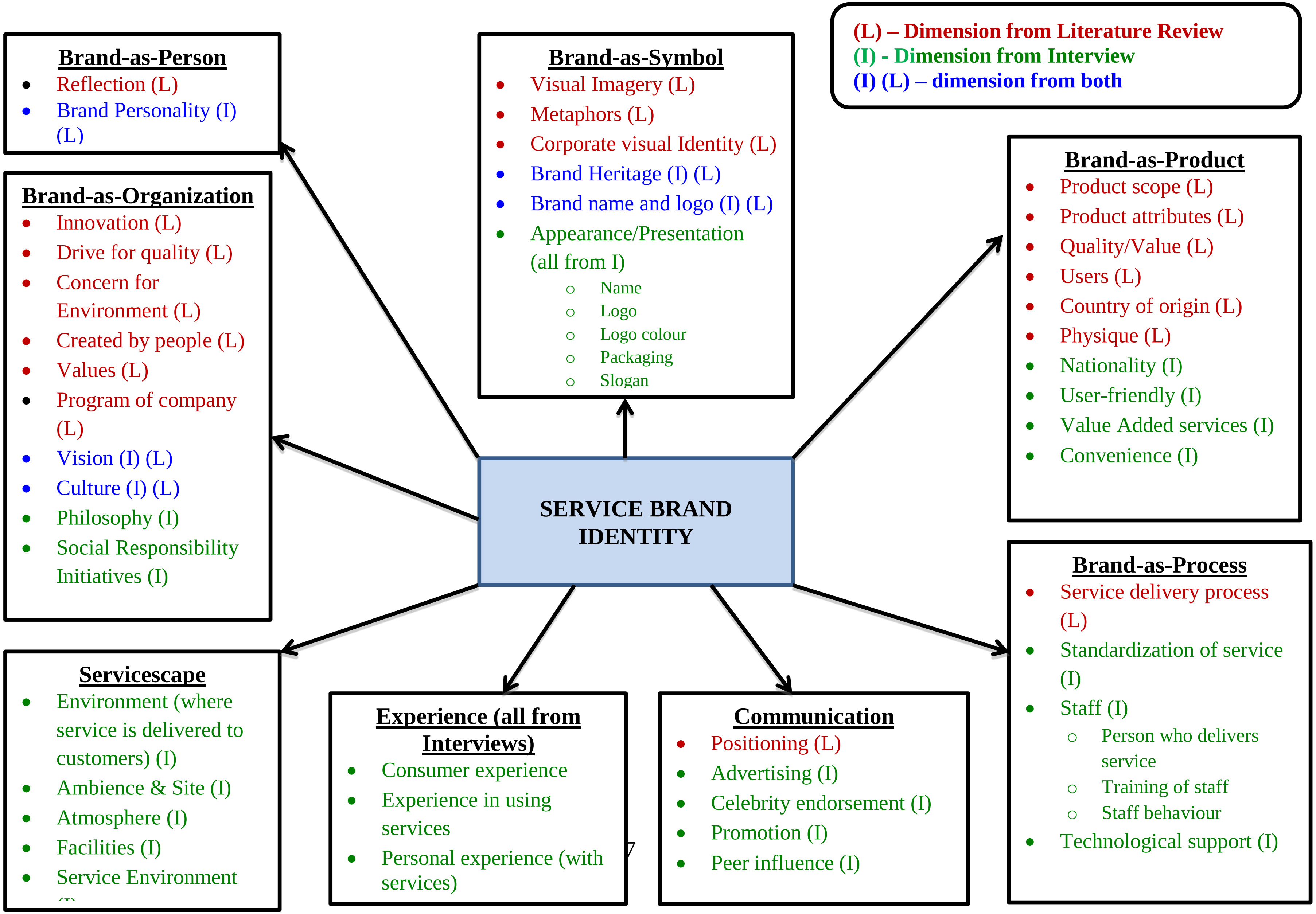


**Figure 6: Proposed Service Brand Identity Dimensions**

Therefore, items that expressed similar meaning but in different way were included in this initial item pool (for example, 'Advertising plays an important role in shaping service brand identity,' 'Advertising plays an important role in communicating service brand identity'; 'Staff training is an important criteria in selecting a service brand,' 'Staff training is an important criteria for evaluating service brand.')

Scale development literature suggests that it is impossible to suggest the exact number of items to generate in an initial item pool. Therefore, the general rule is *'the larger the item pool, the better'* (DeVellis 2003, p.66) as there is always scope for reviewing and removing items at later stages of the scale development process. Therefore, the number of items to be generated was not established before item generation stage, rather the focus was on generating items to capture each of the dimensions and sub-dimensions (shown in Figure 5) of service brand identity. Items were generated so as to reflect all the hypothesized components/dimensions of SBI (Furr, 2011). Although most of the items in this study are new and have been generated for this study by the researcher, some of these items were informed by the literature (for e.g. see Appendix B Table 43, p.273, items related to brand-as-symbol dimension (IT 1-8, IT 17 and IT18), and brand-as-organisation dimension (IT52, IT56, IT60 and IT61). However, since there was no prior existing scale on service brand identity, pre-existing items could not be adopted for this study.

## 4.4 Item Purification

### Stage 1 and 2: Item Review by Two Independent Academic Experts

The process of item purification (reduction) began after generating a pool of potential scale items and was carried out in three stages. In stage one, all the items were subject to review by two independent marketing academic experts who reviewed each statement and made required revisions to make the wording as precise as possible (Churchill, 1979). For example, 'Brand X's overall presentation and appearance plays an important role in forming its brand identity' was replaced by 'The appearance of the place where Brand X is delivered reflects its brand identity.' Similarly, 'Word-of-Mouth plays an important role in forming perception about brand identity' was replaced by 'Word-of-Mouth communicates brand X's identity.'

Both the reviewers were also asked to check that list of items does not include *exceptionally lengthy items*, *double barreled items* (DeVellis, 2003) and *leading or presumptive items* (Furr, 2011). Whereas lengthy items tend to diminish clarity of the item, double barreled items can reflect two or more questions/ideas which can create confusion for the respondents. Likewise, leading items or items that presume respondents' actions can lead to responses with ambiguous or missing data (Furr, 2011). Thus, these criteria guided the reviewers in evaluating the items.

This was an important stage in scale development process as it helped in evaluating the clarity, conciseness and readability of each item, thereby establishing face and content validity of items (Walsh & Beatty, 2007). Based on this review, the initial item pool of 168 items was reduced to 79 items as shown in Table 43 in Appendix B.

In stage two, after suggested re-wording, omission and addition of relevant items, the same academic experts reviewed the 79 items again, this time to evaluate the suitability of the items to capture the construct (service brand identity). While earlier the focus was primarily on reviewing the sentence structure, language and clarity in conveying desired meaning, now the focus was on reviewing whether the items were able to capture the construct dimension. Items that were repetitive or were not able to relate with their respective dimension were removed. This resulted in 79 items being further reduced to 47 items. These 47 items are listed in Table 10 below:

**Table 20: Items Obtained after Stage 2 Item Review (47 items)**

| Dimension Label | Code | Item |
|---|---|---|
| **Brand-as-Symbol** | IT17 | The symbol used by this brand |
| | IT20 | The name of this brand |
| | IT19 | The logo used by this brand |
| | IT15 | The colour used by this brand in its logo, design etc. |
| | IT13 | The packaging of this brand |
| | IT21 | The visual appeal of the brand's website |
| | IT9 | The history of this brand |
| **Brand-as-Product** | IT49 | This brand's association with a particular customer group |
| | IT48 | The country of origin of this brand |
| | IT51 | The design of this brand's website |
| | IT43 | The availability of this brand where you live |
| | IT41 | The unique service offered by this brand |
| | IT31 | Value-added or complimentary services provided by this brand |
| | IT22 | The product design utilized by this brand |
| | IT168 | The personality projected by this brand |
| **Brand-as-Organization** | IT52 | Leadership of the organization (like CEO, executives etc.) associated with this brand |
| | IT59 | The company culture embedded in this brand |

| | | |
|---|---|---|
| | IT63 | The overall reputation of this brand |
| | IT61 | Social responsibility of this brand |
| | IT60 | The values of this brand |
| **Brand-as-Process** | IT71 | The training and professionalism of service staff working for this brand |
| | IT92 | The extent to which this brand is known for providing standardized service to its customers |
| | IT105 | The ability to carry out online transactions through the brand's website |
| | IT104 | The extent to which this brand's website is easy to understand |
| | IT75 | The behaviour of the staff who deliver the service for this brand |
| | IT80 | The reliability of the service provided by this brand over time |
| | IT90 | The extent to which this brand provides customized service for you |
| | IT103 | The ease with which this brand's website can be used |
| | IT88 | The level of interaction between you and service staff of this brand |
| | IT78 | The quality of the service provided by this brand |
| | IT106 | The ability to complete most/all business processes via this brand's website |
| | IT102 | Website that loads quickly |
| **Brand-as-Service communication** | IT112 | The word-of-mouth communication (that you receive from your friends, family or peers) related to this brand |
| | IT137 | Adequate information available on the brand's website |
| | IT136 | The brand's website that allows interaction with it to receive tailored information |
| | IT132 | The celebrity endorsement associated with this brand |
| | IT108 | The advertisements used by this brand |
| | IT123 | Promotions carried out by this brand |
| | IT116 | The positioning of this brand in your mind |
| **Brand-as-Service Experience** | IT140 | Your relationship with this brand (relationship could be good,bad,friendly etc.) |
| | IT139 | Your prior experience of this brand |
| | IT148 | The overall experience of using this brand's website |
| | IT147 | Your relationship with people providing the service |
| **Brand-as-Servicescape** | IT154 | The physical facilities provided by this brand in its service environment |
| | IT165 | The appearance of the place where you receive or experience the service |
| | IT159 | The ambience of the setting where the brand is delivered (ambience includes things like music, fragrance, lighting, ventilation etc.) |
| | IT149 | The general environment in which this brand is delivered (online/in-store) |

**Stage 3: Expert Panel Review**

After refining and purifying the scale items across two stages, a third stage was adopted to further purify and refine the items. Stage three was named 'Expert panel review' and this was conducted in line with the scale development procedure suggested by DeVellis (2003). The difference between the first two stages and the 'expert panel review' stages of item refining was that the former was primarily concerned with the items' readability, conciseness, removing redundant items and checking the language used, whereas the latter was primarily concerned with the content represented by the items, i.e. ensuring that the items were within the domain of the construct and measure what they intend to measure.

The expert panel review entailed asking a group of knowledgeable experts in the content area to review the item pool (DeVellis, 2003). This helped in maximising the content validity of the scale. Other scale development studies have also adopted this method to refine their scale items (e.g. El Manstrly & Harrison, 2013) and to improve their content validity. Therefore, the need for conducting such review was justified.

### 4.4.1 Aims and Objectives

The objectives of expert panel review were three-fold:

- To ask experts to approve/disprove whether the items are capturing their respective dimension.
- To suggest if there is any need to make changes in item wording to improve its clarity, conciseness or overall meaning.

- To suggest items or dimensions that might not have been included but must be included in order to measure the construct.

### 4.4.2 Procedure and Participants

Guided by the above objectives, an expert panel review was conducted and administered through e-mail. The procedure began by preparing a list of potential participants. The researcher manually searched various university websites and consulted prominent journal articles in the area to arrive at final names. An excel file was prepared that contained the name of the potential participant, affiliation, their area of expertise, contact e-mail and qualifications. A total of 35 internationally renowned academics experts were finally included in this list, all of whom possessed significant research experience in some combination of services marketing, and/or Branding, psychometrics or scale development and had a doctoral degree. Experts who participated in the review were from the US (2), UK (6) and New Zealand (1) Universities. Next, an e-mail was sent to all the potential participants seeking their consent to participate in the expert panel review. Out of 35, eleven academics responded to the e-mails indicating their willingness to participate. Having received their consent, a survey form, prepared in excel, containing 47 scale items was sent to these eleven academics.

### 4.4.3 Instrument

All the 47 items were put together in the form of a survey using an excel spreadsheet. This survey included instructions to guide the participants regarding the objective of the survey and how they should complete the survey. This survey asked each of the participants to qualitatively assess the items on three criteria: a) the relevance of each item to the corresponding/hypothesized brand identity dimension as being ‘high’, ‘medium’ or ‘low’; b) the need for any change in the wording of the scale item; and c) suggest whether the item is a candidate for elimination.

### 4.4.4 Duration

This survey was conducted across a period of two months starting 26 March 2013. Two weeks were given to each participant to complete the survey and return. A reminder e-mail was sent after two weeks to those who had not responded.

### 4.4.5 Analysis

Nine out of eleven academics, who participated in the expert panel review, returned the completed survey form. The analysis of their responses was done based on pre-set criteria: items whose relevance was rated as high or medium by four or more experts were retained. If the participants suggested any change in the wording of an item it was taken into consideration and changes were made accordingly. Slight changes were made to the wordings of six items based on experts’ suggestions.

### 4.4.6 Expert Panel Review Results

In total, 12 items were eliminated either for not being able to capture a BI dimension adequately or for being redundant. Thus, the completion of this process resulted in a refined 35-item scale with multiple items to represent each of the seven dimensions. Overall, this expert review helped in retaining only those items that adequately capture the hypothesized service brand identity dimension. The participants also suggested deletion of some items. For example, they suggested removal of item 13 (shown in Table 11).

**Table 11: List of Items Eliminated after Expert Panel Review Process**

| S.No | Item code | Reason for Removal of the item |
|---|---|---|
| 1 | IT13 | Removed on the basis of expert's suggestion that packaging does not fit the service context and it is not relevant for service brands |
| 2 | 1T51 | 'design of website' Website item[2] |
| 3 | IT104 | Website item |
| 4 | IT103 | Website item |
| 5 | IT106 | Website item |
| 6 | IT102 | Website item |
| 7 | IT136 | Website item |
| 8 | IT105 | Website item |
| 9 | IT21 | Website item |
| 10 | IT137 | Website item |
| 11 | IT9 | 'history of brand' did not seem to be relevant by experts; experts suggested removing this item |
| 12 | IT17 AND 19 | (items related to brand symbol/logo) combined into 1 item |

Other changes – Some other changes were incorporated in the items based on the suggestions by the experts. Table 12 below lists the type of changes made to the items following expert panel review results.

[2]All items related to the online aspects, website aspect of brands were withdrawn in order to focus only on the offline services and their aspects

**Table 12: Changes made to items after Expert Panel Review**

| Item Code | Item Statement | Status |
|---|---|---|
| IT17 and 19 | The symbol used by this brand<br>The logo used by this brand | Two items combined together in 1 item; logo or symbol of brand X; therefore 1 item reduced |
| IT20 | The name of this brand | Retained, no change |
| IT15 | The colour used by this brand in its logo, design etc. | Retained, slight change in wording |
| IT13 | The packaging of this brand | Removed |
| IT21 | The visual appeal of the brand's website | Removed |
| IT9 | The history of this brand | Removed |
| IT49 | This brand's association with a particular customer group | Retained, slight change in wording |
| IT48 | The country of origin of this brand | Retained |
| IT51 | The design of this brand's website | Removed |
| IT43 | The availability of this brand where you live | Retained; slight change in wording (Availability replaced with accessibility) |
| IT41 | The unique service offered by this brand | Retained; slight change in wording (Uniqueness replaced with distinctiveness) |
| IT31 | Value-added or complimentary services provided by this brand | Retained; slight change in wording (Value-added or complimentary replaced with value-added benefits) |
| IT22 | The product design utilized by this brand | Retained; reworded |
| IT169 | The personality projected by this brand | (moved to brand as symbol dimension) |
| IT52 | Leadership of the organization (like CEO, executives etc.) associated with this brand | Retained; edited wording (Leadership replaced with brand vision) |
| IT59 | The company culture embedded in this brand | Retained; slight change in wording |
| IT63 | The overall reputation of this brand | Retained;<br>Reworded: reputation of brand X |
| IT61 | Social responsibility of this brand | Retained; slight change in wording (social responsibility replaced with corporate social responsibility) |
| IT60 | The values of this brand | Retained;<br>Reworded: Values projected by brand X |
| IT71 | The training and professionalism of service staff working for this brand | Retained;<br>Reworded: Expertise of staff |
| IT92 | The extent to which this brand is known for providing standardized service to its customers | Retained;<br>Reworded: standardisation changed to consistency |
| IT105 | The ability to carry out online transactions through the brand's website | Removed |
| IT104 | The extent to which this brand's | Removed |

| | | |
|---|---|---|
| | website is easy to understand | |
| IT75 | The behaviour of the staff who deliver the service for this brand | Retained |
| IT80 | The reliability of the service provided by this brand over time | Retained |
| IT90 | The extent to which this brand provides customized service for you | Retained; Reworded: Captured under quality of service provided |
| IT103 | The ease with which this brand's website can be used | Removed |
| IT88 | The level of interaction between you and service staff of this brand | Retained; Reworded: Level of interaction replaced with quality of interaction |
| IT78 | The quality of the service provided by this brand | Retained |
| IT106 | The ability to complete most/all business processes via this brand's website | Removed |
| IT102 | Website that loads quickly | Removed |
| IT112 | The word-of-mouth communication (that you receive from your friends, family or peers) related to this brand | Retained |
| IT137 | Adequate information available on the brand's website | Removed |
| T136 | The brand's website that allows interaction with it to receive tailored information | Removed |
| IT132 | The celebrity endorsement associated with this brand | Retained |
| IT108 | The advertisements used by this brand | Retained |
| IT123 | Promotions carried out by this brand | Retained |
| IT116 | The positioning of this brand in your mind | Retained |
| IT140 | Your relationship with this brand (relationship could be good, bad, friendly etc.) | Retained |
| IT139 | Your prior experience of this brand | Retained |
| IT148 | The overall experience of using this brand's website | Retained |
| IT147 | Your relationship with people providing the service | Retained |
| IT154 | The physical facilities provided by this brand in its service environment | Retained |
| IT165 | The appearance of the place where you receive or experience the service | Retained |
| IT159 | The ambience of the setting where the brand is delivered (ambience includes things like music, fragrance, lighting, ventilation etc.) | Retained |
| IT149 | The general environment in which this brand is delivered (online/in-store) | Retained |

#### 4.4.6.1 Items that were removed and reasons

Out of twelve items that were removed after expert panel review, nine items were related to the online aspect of services. All these items related to the website of the brand were removed based on several issues raised by the panel participants regarding the suitability of these items. Therefore, these items were particularly removed based on suggestions from almost all the experts to eliminate these items.

For example, regarding the item 'IT21-The visual appeal of the brand's website', the experts suggested that it is wider than the symbol, and "perhaps more relevant elsewhere." Similarly for item 'IT 51-The design of this brand's website,' which was put under brand-as-product dimension considering the design aspect related with the brand, experts suggested that this item did not belong to this item (Expert 2, UK); Expert 5 (UK) suggested that it is a repetition of IT2; Expert 6 (UK) suggested that "Does this (*item*) relate to the navigation of the website? Need to distinguish this from the visual appeal of the website above. If navigation, might it fit better under Brand-as-process?"

There were five items related to the website under the brand-as-process dimension. All five were critiqued by the panel experts and they had issues with these as well. For example, 'IT102-Website that loads quickly' was not considered to be relevant for brands (Expert 2, UK). Other concerns were: "Might this be affected by other factors (user's computer, broadband access, etc.)?" (Expert 6, UK); "Do not think this is a major factor on consumers' minds, I guess until it takes forever to load!” (Expert 9, UK). All these experts suggested deleting this item. Apart from these suggestions, one of the panel experts suggested merging this item IT102 with ‘IT106 - The ability to complete most/all business processes via this brand's website’ which is also related to the online aspect of service brand. However, other experts suggested deletion of IT106 too, and gave reasons that “*(it)* depends on target audience and type of service being offered”, “doesn’t relate to the brand.”

‘IT103 -The ease with which this brand's website can be used’ and ‘IT104-The extent to which this brand's website is easy to understand’ were also removed based on the suggestion that these items have more to do with communication (Expert 2, UK); “only 1 question on website needed (Expert 5, UK)” (suggesting removal of one of these items); “Possible overlap with item 51 (Expert 6, UK)”; “You have a number of very closely related online user experience questions. Not sure if this is necessary (Expert 9, UK).” Two other items received a similar feedback from the experts, for example, one of the experts (Expert 5, UK) suggested deleting IT136 after merging with IT137 (‘IT137 -Adequate information available on the brand's website’ and ‘IT136 -The brand's website that allows interaction with it to receive tailored information’).

Thus, based on the above analysis, and after discussing the analysis results with other marketing academics at the University of Edinburgh, a decision was made to eliminate all the nine website items from further analysis and to keep the focus on items that capture the offline aspects that can contribute to the building of service brand identity.

Apart from this, three other items were also removed after expert panel review analysis. Majority of experts (five out of nine) suggested that packaging is not relevant for service brands and it doesn't fit services well. Apart from this experts also raised concerns that consumers (who would complete the main questionnaire containing these items as questions) might not be able to understand the meaning of packaging in case of services (since services are intangible and there's not packaging involved as such). Therefore, addressing these concerns, this item was eliminated from further consideration. Next, for two of the items: 'IT17-The symbol used by this brand' and 'IT19 -The logo used by this brand', the experts were concerned with the clarity of meaning and difference between a symbol and logo. They suggested explaining further, or merging these two into one item. Since the brand identity literature places a great importance on the appearance of the brand that includes a recognizable symbol associated with it, or a logo that reminds people of the brand, it was decided that this item should not be eliminated altogether. Therefore, these two items were merged together into one item. Lastly, 'IT9 - The history of this brand' was also eliminated considering the experts' concerns that this item is too broad to be considered under the brand-as-symbol dimension. Also, some experts suggested that this item was not very relevant.

#### 4.4.6.2 Changes in Item Wording

Minor changes to the wording of some of the items were made in order to enhance their clarity, meaning and readability for the final survey participants. These changes were based on the suggestions from expert panel review. For example, in IT88 (see Table 12) 'level of interaction' term was replaced with 'quality of interaction' following concerns regarding clarity of meaning of this item. Similarly, in IT92, the word 'standardized' was replaced with 'consistent', in IT31 'Value added/complimentary services' was replaced with 'value added benefits', in IT43, the word 'availability' was replaced by 'accessibility'. Other similar changes to the wording of items have been highlighted in Table 12.

#### 4.4.6.3 Changes in Dimension Labelling

At this stage, revision of dimension labels was also carried out. The process involved revising dimension labels to ensure congruency between the items and the label (as the item groupings had changed and reduced throughout the process of refinement) and also to reflect the feedback from the expert panel. Following this, one of the dimensions that was labelled as 'brand-as-product,' following Aaker's (1996) terminology, was re-labelled as 'brand-as-service offering'. The experts (who participated in the expert panel review) had also suggested revising the label of this particular dimension to increase its closeness to a service context and also to reflect greater congruency between the label and its underlying items. No changes were made to rest of the dimension labels.

Table 13 below highlights the final list of 35 items retained after expert panel review along with their corresponding dimensions. New item codes were assigned to each item (starting from item 1 to item35) for simplicity purposes.

**Table 13: List of Items Retained after Expert Panel Review**

| New Item code | Dimensions and their corresponding items |
|---|---|
| | **Brand-as-Symbol** |
| Item1 | The name of brand X |
| Item2 | The logo or symbols used to identify brand X |
| Item7 | The colour(s) associated with brand X |
| Item35 | The customers who buy brand X |
| Item23 | The personality of brand X |
| | **Brand-as-Service Offering** |
| Item8 | The country of origin of brand X |
| Item24 | The accessibility of brand X |
| Item5 | The distinctiveness of brand X |
| Item22 | The value-added benefits offered by brand X |
| Item30 | The positioning of brand X relative to other similar brands |
| | **Brand-as-Service Process** |
| Item29 | The consistency of service of brand X |
| Item18 | The reliability of brand X over time |
| Item6 | The behaviour of staff delivering brand X |
| Item12 | The expertise of staff working for brand X |
| Item26 | The quality of the delivery of brand X |
| Item21 | The quality of the service provided by brand X |
| Item14 | The quality of interaction with service staff delivering brandX |
| | **Brand-as-Organisation** |
| Item31 | The company vision associated with brand X |
| Item15 | The company culture associated with brand X |
| Item9 | The reputation of brand X |
| Item34 | The social responsibility projected by brand X |
| Item25 | The values projected by brand X |
| | **Brand-as-Service Experience** |
| Item10 | Your prior experience with brand X |
| Item19 | Your relationship with brand X |
| Item16 | Your relationship with the people providing brand X |
| Item33 | Your relationship with other customers using brand X |
| | **Brand-as-Servicescape** |
| Item17 | The facilities available in brand X's delivery environment |
| Item13 | The appearance of the delivery environment used by brand X |
| Item27 | The ambience in brand X's delivery environment |
| Item32 | The general environment in which brand X is delivered |
| | **Brand-as-Service Communication** |
| Item11 | The word-of-mouth communication from other consumers (face-to-face or social media) related to brand X |
| Item3 | The celebrity endorsement associated with brand X |
| Item4 | The advertising used by brand X |
| Item20 | Promotions carried out by brand X |
| Item28 | Public Relations (PR) activities associated with brand X |

### 4.4.7 Section Summary

The main aim of this section was to discuss and highlight how the scale items were refined through an expert panel review consisting of nine academic experts from the UK and the UK. The procedure for conducting this panel review was discussed and the instrument used was also highlighted. Further, this section discussed the analysis procedure for analyzing responses obtained from the expert review of scale items. The results highlighted that post the panel review, twelve items were eliminated and some minor changes to the wordings of some of the items were made following experts' suggestions. Lastly, a list of 35 items reviewed and scrutinized by experts was provided in Table 13. These 35 items were further purified quantitatively through survey pre-test before administering to the final sample. The next section provides further details related to the pilot survey. Overall, the expert panel review helped in retaining only those items that adequately captured/explained the hypothesized service brand identity dimension.

## 4.5 Survey pre-testing

The completion of the expert panel review resulted in the initial list comprising of 35 statements/items. These items were formulated into a questionnaire and adhering to Reynolds et al.'s (1989) recommendations, the questionnaire was pre-tested among a convenience sample of 106 consumers.

### 4.5.1 Aims and Objectives

The primary objective of conducting a survey pre-test was to reduce the number of items based on statistical analyses, i.e. to remove items that do not belong to the domain of service brand identity. In addition to this, the survey pre-test also served as a means to establish early scale psychometric properties (Sweeney & Soutar, 2001).

### 4.5.2 Procedure

An online survey was developed using Bristol Online Survey software. Survey design and structure is discussed in detail in chapter 3. Snowball sampling method was adopted to collect responses for the pilot survey. The survey URL was sent to the personal contacts and they were requested pass on the survey link to at least five of their friends or colleagues. In addition to this, the survey link was also sent to research administrators of all the 22 schools in the University of Edinburgh and they were requested to forward the link to the staff members. This sampling method was adopted to improve the response rate for the survey and it resulted in a convenience sample for the pilot study. Moreover, convenience samples have been commonly used by other scale development studies for pre-test phase of the scale development process (Worthington & Whittaker, 2006; Colwell et al. 2008).

The pilot survey was conducted over two months (June 2013-August 2013) which resulted in collection of a total of 106 responses. This sample size represented approximately 20 per cent of the final sample, which was considered adequate for testing (Chisnall, 2001). In order to facilitate a wide range of scores (McMullan, 2005), a 7-point Likert scale was used to measure the 35 scale items. Since it was a pilot survey, the questionnaire also included a text box that allowed the participants to provide any comments or suggestions related to any of the 35 items. This text box was included only in the pilot survey and not in the main survey. The reason for including this text box was to enable participants to make comments regarding the clarity, conciseness, readability and meaning of the items should they have any issues with that. Doing this helped in maximizing the content validity of items.

### 4.5.3 Pilot Data Analysis and Results

The first step in the analysis was to note whether the participants had raised any concerns over any of the 35 items through the text box provided next to each item. However, on careful analysis, it was noted that none of the 106 participants raised any concerns or provided any additional comments on items. This suggested that the participants were able to understand each item as intended. Next, the data collected was checked for any missing values or incomplete responses. However, apart from few missing responses to classification questions (particularly nationality and income) all other responses were complete. At this stage, since the objective was to refine items, missing data on classification questions did not pose any difficulty. Hence, all the responses were included in the analysis. The analysis of pilot data started with determining the appropriateness of 35 items in capturing the seven dimensions of brand identity. Firstly, the KMO test was run to check the sampling adequacy. KMO values of 0.60 or more indicate that the sample is adequate for running factor analysis. The KMO value obtained for the pilot sample was 0.80 which was well above the recommended value and hence the data was deemed suitable for further factor analysis. Also, Bartlett's test of sphericity provided a significant $\chi 2$ value of 2316.490 ($p<0.000$, df=595). After this, Principal Component Analysis (PCA) with varimax rotation was conducted on this pilot data. PCA was used with varimax rotation as it is a recommended approach when establishing preliminary solutions using exploratory factor analysis (Pett et al. 2003). Varimax rotation provides a clear separation of the factors (Hair et al. 2006). Varimax with Pearson correlation is a widely used measure in marketing scale development literature to understand the degree of relationship between variables and it has been widely used for pilot testing (e.g. Blankson, 2008; El-Manstrly and Harisson 2013; Christodoulides et al. 2009). The analysis was performed using SPSS software that uses Pearson correlation as default for factor analysis. Nine factors were extracted based on the eigenvalue >1 rule (Hair et al. 2006).

Further, Hair et al. (2006) suggests that in a sample of 100, factor loadings of 0.55 or greater can be considered as significant. Table 14 highlights that except five items, all the other items had factor loadings of 0.55 or greater. Table 14 also shows that five items (*Item5 The distinctiveness of brand X; Item9 The reputation of brand X; Item10 Your prior experience with brand X; Item17 The facilities available in brand X's delivery environment; Item23 The personality of brand X)* had low factor loadings (<0.55) and cross-loadings and one of the items (*Item 30 The positioning of brand X relative to other similar brands*) was the only item loading on factor 9 (single item factors were not considered since these are meaningless (Hair et al., 2006)). These six items were, therefore, eliminated and PCA was re-run. Table 15 shows the final eight-factor 29 item solution obtained after pilot testing. Following the scale development guidelines provided by Churchill (1979), coefficient alpha was computed separately for each of the eight factors (dimensions). This was done to ascertain the extent to which items making up each dimension shared a common core (Parasuraman et al., 1988, p.19). The values of coefficient alpha ranged from 0.54 to 0.87 across the eight dimensions and all the items had factor loading of 0.55 or above (shown in Table 15). Thus, at the end of the survey pre-test, a final list of 29 items, eight factors was obtained to be tested on a wider sample (Churchill, 1979). Further, all the 29 items, 8 factors were examined to evaluate that they make theoretical sense, i.e. they are theoretically meaningful. For this, presentation was made in front of marketing experts within the business school and they were shown the results to suggest that the factors and their respective items were acceptable for further analysis.

Out of 35 items that were included in pilot survey, six items did not perform well based on pilot analysis results.  These six items were: The distinctiveness of brand X; The reputation of brand X; Your prior experience with brand X; The facilities available in brand X's delivery environment; The personality of brand X; The positioning of brand X relative to other similar brands.

Surprisingly, these items were capturing those dimensions of brand identity that are widely considered as important in the literature. For example, previous literature on brand identity has consistently identified brand positioning as a critical dimension to assess brand identity (Upshaw, 1995; De Chernatony, 1999;

Ghodeshwar, 2008). However, empirical results from this study suggested otherwise. Another surprising pre-test result was the omission of the "brand personality" dimension of brand identity. Pilot test results suggested that the item capturing this dimension cross-loaded on two factors with factor loadings below the significant level of 0.50 (0.47 and 0.42 respectively) (Hair et al., 2006). Previous literature on brand identity has, however, consistently identified brand personality as a critical dimension of brand identity (Upshaw, 1995; De Chernatony, 1999; Kapferer, 2000). Similarly, the item capturing 'reputation' dimension of brand identity was also dropped at the pilot testing stage due to a low factor loading. Even though there are suggestions in the literature that reputation can be both a cause and an outcome of strong brand identity (da Silveira et al., 2013), it was not supported empirically. Perhaps, it needs to be tested separately in relation to brand identity.

These results suggest that, contrary to the current brand identity literature, perhaps consumers do not see dimensions like reputation, personality, positioning and uniqueness of the brand as contributing factors to the development of service brand identity. This might be attributed to the differences between service and product context. For example, in a service context, consumers value brand dimensions like staff manner, facilities, experience etc. whereas dimensions like brand personality, price, brand advertising do not hold much importance (O'Cass & Grace, 2003). Conversely, brand personality, positioning, and reputation are considered as important aspects of product brands and there has been extensive research on these concepts (e.g. see Aaker, 1997; Aaker, 1996; Walsh & Beatty, 2007). Omission of these dimensions, at an early stage (i.e. Pilot testing) in this research lends support to the initial assumption of this research that all the dimensions suggested in the current brand identity literature might not be applicable to service brands; some of them might not be relevant.

**Table 14: PCA Solution before Eliminating Six Items**

| | **Factor 1** | **Factor 2** | **Factor 3** | **Factor 4** | **Factor 5** | **Factor 6** | **Factor 7** | **Factor 8** | **Factor 9** |
|---|---|---|---|---|---|---|---|---|---|
| item1 | | | | | | 0.77 | | | |
| item2 | | | | | | 0.72 | | | |
| item3 | | 0.83 | | | | | | | |
| item4 | | 0.80 | | | | | | | |
| item5 | | | | | | 0.48 | | | |
| item6 | | | 0.72 | | | | | | |
| item7 | | | | | | | | 0.60 | |
| item8 | | | | | | | | 0.83 | |
| item9 | | | 0.48 | | | | | | |
| item10 | 0.49 | | | | | | | | |
| item11 | | | | | | | 0.69 | | |
| item12 | | | 0.74 | | | | | | |
| item13 | | | | 0.81 | | | | | |
| item14 | | | 0.66 | | | | | | |
| item15 | | | | | 0.68 | | | | |
| item16 | | | 0.65 | | | | | | |
| item17 | | | | 0.47 | | | | | |
| item18 | 0.77 | | | | | | | | |
| item19 | | | 0.56 | | | | | | |
| item20 | | 0.78 | | | | | | | |
| item21 | 0.69 | | | | | | | | |
| item22 | 0.62 | | | | | | | | |
| item23 | | 0.47 | | | | 0.43 | | | |
| item24 | 0.68 | | | | | | | | |
| item25 | | | | | 0.64 | | | | |
| item26 | 0.57 | | | | | | | | |
| item27 | | | | 0.71 | | | | | |
| item28 | | 0.68 | | | | | | | |
| item29 | 0.77 | | | | | | | | |
| item30 | | | | | | | | | 0.62 |
| item31 | | | | | 0.68 | | | | |
| item32 | | | | 0.63 | | | | | |
| item33 | | | | | | | 0.65 | | |
| item34 | | | | | 0.78 | | | | |
| item35 | | | | | | | 0.59 | | |
| **Coeff α values** | 0.87 | 0.86 | 0.82 | 0.78 | 0.80 | 0.74 | 0.71 | 0.54 | - |

**Table 35: PCA Solution after Item Elimination (Pilot Testing)**

| Factor | Item number and Statement | Factor Loading |
|---|---|---|
| Factor1 | Item18 The reliability of brand X over time | 0.77 |
| | Item 21 The quality of the service provided by brand X | 0.68 |
| α =0.87 | Item 22 The value-added benefits offered by brand X | 0.64 |
| | Item 24 The accessibility of brand X | 0.71 |
| | Item 26 The quality of the delivery of brand X | 0.59 |
| | Item 29 The consistency of service of brand X | 0.74 |
| Factor2 | Item 3 The celebrity endorsement associated with brand X | 0.84 |
| | Item 4 The advertising used by brand X | 0.81 |
| α =0.86 | Item 20 Promotions carried out by brand X | 0.76 |
| | Item 28 Public Relations (PR) activities associated with brand X | 0.68 |
| Factor3 | Item 6 The behaviour of staff delivering brand X | 0.74 |
| | Item12 The expertise of staff working for brand X | 0.75 |
| α =0.82 | Item 14 The quality of interaction with service staff delivering brand X | 0.68 |
| | Item 16 Your relationship with the people providing brand X | 0.66 |
| | Item 19 Your relationship with brand X | 0.55 |
| Factor4 | Item 13 The appearance of the delivery environment used by | 0.84 |
| | brand X | 0.67 |
| α =0.78 | Item 27 The ambience in brand X's delivery environment<br>Item 32 The general environment in which brand X is delivered | 0.65 |
| Factor5 | Item 15 The company culture associated with brand X | 0.67 |
| | Item 25 The values projected by brand X | 0.65 |
| α =0.80 | Item 31 The company vision associated with brand X | 0.73 |
| | Item 34 The social responsibility projected by brand X | 0.76 |
| Factor6 | Item 1 The name of brand X | 0.80 |
| α =0.77 | Item 2 The logo or symbols used to identify brand X | 0.78 |
| Factor7 | Item 11 The word-of-mouth communication from other | 0.74 |
| α =0.71 | consumers (face-to-face or social media) related to brand X | 0.70 |
| | Item 33 Your relationship with other customers using brand X<br>Item 35 The customers who buy brand X | 0.51 |
| Factor8 | Item 7 The colour(s) associated with brand X | 0.56 |
| α =0.59 | Item8 The country of origin of brand X | 0.88 |

### 4.5.4 Section Summary

This section highlighted the aims and objectives of conducting a survey pre-test. It discussed the procedures undertaken to conduct the survey and analysis techniques used to analyze the data. Survey pre-test resulted in deletion of 6 items based on low factor loadings. This means that the 35 scale items obtained from the expert panel review were reduced to 29 items after pilot survey analysis. These 29 items were then administered to the final sample of 500 UK consumers.

The next chapter discusses the analysis of the final survey and presents the final results.

# CHAPTER 5 FINAL DATA ANALYSIS AND RESULTS

## 5.1 Chapter Introduction

The aim of this chapter is to report the research findings from the analysis of quantitative data collected from a sample of 500 UK consumers through an online survey. SPSS 19 and AMOS 21 was used for analyzing the data. This chapter is instrumental in taking the thesis forward by facilitating answers to the research questions raised in the Methodology chapter (Chapter 3).

There are four sections in this chapter: Data preparation and Assessment, Exploratory Factor Analysis, Confirmatory Factor Analysis and Scale Cross-Validation.

*Data Preparation and assessment* deals with examining the sample to identify issues that can affect the results. This includes inspecting cases and variables with missing values (missing data analysis), unengaged responses and distribution of data. Further, this section reports descriptive statistics of the achieved sample and the sample split into calibration and validation samples.

The next section on *Exploratory Factor Analysis (EFA)* reports the development of the service brand identity scale using the calibration sample: the scale's internal consistency, reliability and factor structure are reported in this section.

The third section on focuses on conducting *Confirmatory Factor Analysis (CFA)* on the calibration sample to confirm the factor structure and to achieve a measurement model which is subsequently fitted to the sample.

The *scale cross-validation* section reports the results from validating the measurement model on the validation sample: this section establishes the scale's convergent, discriminant, and nomological validity.

The last section (conclusion) of this chapter summarizes the research findings and lays the foundation for the next chapter.

## 5.2 Data Preparation and Assessment

### 5.2.1 Missing Data Analysis

Byrne (2001) suggests that incomplete data must be addressed before beginning any analysis since it can bias any conclusions drawn from it. Through SPSS, three cases were identified as having missing data. A visual inspection of these three cases indicated that the data was missing randomly without any identifiable distinct pattern (Hair et al., 2006). This ruled out the possibility of data missing for a particular scale item due to reasons such as lack of clarity, readability or understandability.

Next, the pattern of missing data and the extent of missing data were examined for individual items, individual cases and overall (Hair et al., 2006). These three cases had 40% or over of missing data which meant that these respondents did not rate most of the scale items (variables). This would have implications on scale development since without rating each scale item the measurement model in later stages of analysis cannot be estimated. Moreover, Bryman & Cramer (2001) suggest that it is advisable to drop cases from further analysis if many scores are missing from it. Thus, based on these suggestions, it was decided to drop these cases on a pairwise basis from further analysis. From a *practical standpoint* (Hair et al., 2006), of the total sample of 500 observations, only 0.6% observations (n=3) had missing data. Thus, excluding these observations would still keep the sample adequate for further analysis (EFA and CFA). A sample of n=497 was achieved after completing the process of missing data analysis.

### 5.2.2 Unengaged responses

In order to ensure the quality of survey data, a visual inspection was conducted to identify any unengaged responses i.e. cases where respondents rate all the scale items equally (for e.g. rating ALL the scale items as '1' (=Strongly Disagree), or 4 (=Neutral) and so on). Six such cases were identified. Out of these six cases, four cases showed that the respondents had given a '7' rating (meaning strongly agree) to all the scale items. The rest of the two cases showed that the respondent had rated all items as '1' (meaning strongly disagree). Since these six respondents had rated all the items same, whereas there was expectation that some items would be rated differently due to positively and negatively worded items, it was evident that they would provide zero variance. This meant that these observations were not useful and hence were removed from further analysis in order to maintain the quality to data and to avoid any biased results. The sample was, thus, further reduced from 497 to 491 observations.

### 5.2.3 Normal Distribution of Data

Two tests were used to analyze whether the data followed normal distribution. These tests were: Kolmogorov-Smirnov (K-S) and Shapiro-Wilk (S-W) tests (Hair et al. 2006). Normality of the data is indicated if the significance value for these tests is above 0.05 (i.e. $p>0.05$). Table 16, however suggests that significance values for these tests for all the items were below 0.05 indicating that the data was not normally distributed.

However, there are three reasons to support why non-normality of the data is not an issue for this research. First, several researchers have suggested that for large samples ($n\sim200$), the maximum likelihood estimator (used in CFA) is relatively robust against violations of normality assumptions (Gorsuch, 1983; Diamantopoulos et al., 2000; Benson & Fleishman, 1994; Bollen, 1989). In this research, both the calibration and validation samples (explained in section 5.2.5) were well above this size of 200. Second, various scholars have indicated that most data in social sciences has non-normal distribution (Bentler & Chou, 1987; Barnes et al., 2001). Third, data generated using Likert-scale rarely supports normal distribution (Barnes et al., 2001). Further, Gorsuch (1983) points out that "normalizing is not needed as a standard procedure for estimates of factor loading" (p.302).

**Table 16: Tests of Normality**

| | Kolmogorov-Smirnov[a] | | | Shapiro-Wilk | | |
|---|---|---|---|---|---|---|
| | Statistic | Df | Sig. | Statistic | df | Sig. |
| item1 | .219 | 491 | .000 | .846 | 491 | .000 |
| item2 | .206 | 491 | .000 | .875 | 491 | .000 |
| item3 | .173 | 491 | .000 | .884 | 491 | .000 |
| item4 | .179 | 491 | .000 | .890 | 491 | .000 |
| item6 | .316 | 491 | .000 | .728 | 491 | .000 |
| item7 | .140 | 491 | .000 | .911 | 491 | .000 |
| item8 | .173 | 491 | .000 | .894 | 491 | .000 |
| item11 | .189 | 491 | .000 | .884 | 491 | .000 |
| item12 | .300 | 491 | .000 | .759 | 491 | .000 |
| item13 | .186 | 491 | .000 | .871 | 491 | .000 |
| item14 | .280 | 491 | .000 | .779 | 491 | .000 |
| item15 | .215 | 491 | .000 | .868 | 491 | .000 |
| item16 | .214 | 491 | .000 | .842 | 491 | .000 |
| item18 | .380 | 491 | .000 | .680 | 491 | .000 |
| item19 | .219 | 491 | .000 | .838 | 491 | .000 |
| item20 | .170 | 491 | .000 | .906 | 491 | .000 |
| item21 | .379 | 491 | .000 | .675 | 491 | .000 |
| item22 | .198 | 491 | .000 | .862 | 491 | .000 |
| item24 | .262 | 491 | .000 | .786 | 491 | .000 |
| item25 | .235 | 491 | .000 | .845 | 491 | .000 |
| item26 | .309 | 491 | .000 | .740 | 491 | .000 |
| item27 | .230 | 491 | .000 | .867 | 491 | .000 |
| item28 | .148 | 491 | .000 | .911 | 491 | .000 |
| item29 | .340 | 491 | .000 | .719 | 491 | .000 |
| item31 | .188 | 491 | .000 | .887 | 491 | .000 |
| item32 | .234 | 491 | .000 | .855 | 491 | .000 |
| item33 | .147 | 491 | .000 | .918 | 491 | .000 |
| item34 | .150 | 491 | .000 | .908 | 491 | .000 |
| item35 | .151 | 491 | .000 | .927 | 491 | .000 |

a. Lilliefors Significance Correction

### 5.2.4 Profile of the Surveyed Population

Descriptive statistics were used to examine the composition of the final sample (n=491) and to check its similarity in characteristic with the UK population. Details about respondent’s gender, age group, education level, income levels, and working status were obtained through the questionnaire. Table 17 depicts statistics related to these variables. Apart from this, the respondents were also asked to choose one service category (out of the four provided) and a service brand within that category before proceeding to rate the scale items.

Both gender groups were represented fairly evenly in the sample with 54.2 percent females (n=266) and 45.8 percent males (n=225). The sample comprised of respondents from different age groups: 36% aged 55years or above, 20.4% aged 35-44years, 17.5% aged 25-43 years, 16.9% aged 45-54 years and 9.2% aged 18-24 years

In terms of education levels, 27.5% respondents reported having attended high school, 23.5% reported having a 4 year college degree whereas 22.6% reported that they have attended some college. Table 17 provides further details on education levels.

In terms of working status, the majority of respondents (41.5%) indicated that they are in full-time employment whereas 23% respondents indicated that they are not working due to retirement. Table 17 provides further details on working status of respondents.

In terms of household income levels, 22.6% respondents indicated their household income level to be between £20,001-30,000, whereas 21.6% respondents' household income was within the range of £10,001-20,000. Table 17 provides further information regarding respondents' household income.

In the beginning of the questionnaire the respondents were also asked to select one of the four service categories, namely, banking, airlines, hotels or hair salon. Further, they were also asked to choose a service brand from the category they have selected. For example, if a respondent had chosen the banking category, he/she was asked to choose a brand of choice within this category. The questionnaire then asked the respondents to keep their chosen service brand in mind while rating the service brand identity scale items. Analysis of their response suggested that most respondents (45%) chose a brand from the banking industry as the focal point for brand identity, while 27.3% of the respondents chose airline brands. 19.8% chose hotel brands and 7.9% chose hair salon brands (see Table 18).

A comparison of sample characteristics to the 2011 UK census data (see Appendix C) confirms that the sample had broadly similar characteristics as that of the UK population and hence was suitable for further testing.

**Table 17: Full Sample Descriptive Statistics**

| Characteristic | | n | % |
|---|---|---|---|
| **Gender** | Female | 266 | 54.2 |
| | Male | 225 | 45.8 |
| **Age** | 55yrs old or over | 177 | 36.0 |
| | 35-44yrs | 100 | 20.4 |
| | 25-34yrs | 86 | 17.5 |
| | 45-54yrs | 83 | 16.9 |
| | 18-24yrs | 45 | 9.2 |
| **Education** | high school | 135 | 27.5 |
| | 4year college degree | 114 | 23.2 |
| | Some college | 111 | 22.6 |
| | 2year college degree | 53 | 10.8 |
| | Masters degree | 44 | 9.0 |
| | Professional degree | 19 | 3.9 |
| | doctoral degree | 8 | 1.6 |
| | Less than high school | 7 | 1.4 |
| **Working Status** | Full-Time | 204 | 41.5 |
| | Not Working - Retired | 113 | 23.0 |
| | Not Working | 64 | 13.0 |
| | Part-Time | 60 | 12.2 |
| | Other | 28 | 5.7 |
| | Student | 22 | 4.5 |
| **Household Income Level** | £ 20,001 -- 30,000 | 111 | 22.6 |
| | £ 10,001 -- 20,000 | 106 | 21.6 |
| | £ 30,001 -- 40,000 | 91 | 18.5 |
| | Less than £10,000 | 51 | 10.4 |
| | £ 40,001 -- 50,000 | 43 | 8.8 |
| | £ 50,001 -- 60,000 | 32 | 6.5 |
| | £ 60,001 -- 70,000 | 26 | 5.3 |
| | £ 70,001 -- 80,000 | 12 | 2.4 |
| | £ 90,001 and above | 10 | 2.0 |
| | £ 80,001 -- 90,000 | 5 | 1.0 |
| | Missing | 4 | .8 |

**Table 18: Service Categories chosen**

| | | n | % |
|---|---|---|---|
| **Service Type** | **Banking** | 221 | 45.0 |
| | **Airlines** | 134 | 27.3 |
| | **Hotel** | 97 | 19.8 |
| | **Hair Salon** | 39 | 7.9 |

### 5.2.5 Sample Split

Having conducted all the assessments discussed above, the final number of responses that qualified for further analysis was 491. At this stage, the data was ready to be split into calibration and validation samples for conducting exploratory and confirmatory factor analysis (MacCallum et al. 1992; Anderson & Gerbing, 1988).

The complete sample with 491 observations was randomly split into two samples ($n_A$=246) and ($n_B$=245). $n_A$ was used as the calibration sample to assess the internal consistency of the scale (through Chronbach's alpha), to conduct exploratory factor analysis, and to develop and test the measurement model using CFA. $n_B$, on the other hand, was used as a validation sample to cross-validate the scale and assess its validity.

### 5.2.6 Individual Item Evaluation

The first step after collecting and examining the data was to evaluate the performance of individual scale items to examine the ones suitable for the scale and those that were not (DeVellis, 2003). This step is also called scale purification in scale development literature (e.g. Churchill, 1979; Parasuraman et al., 1988) as it establishes the internal consistency of the scale items. For this, the corrected item-scale correlations (the correlation of the item to the summated scale score) for each item were examined.

There are two types of item-scale correlations, namely, uncorrected item-scale correlations and corrected item-scale correlations (DeVellis, 2003). In the former type of correlation, the item in question is correlated with all the other scale items including itself, whereas in the latter type of correlation, the item in question is correlated with all the other scale items excluding itself. Scholars suggest that corrected item-to-total correlations should ideally be examined as it reflects the true picture of the internal consistency of the scale (DeVellis, 2003). On the other hand, an item's inclusion in the uncorrected item-scale correlation can inflate the correlation coefficient, and hence is less suitable to gauge and improve the internal consistency of the scale. Table 19 below shows the item analysis for each scale item.

Table 19 shows that only one item (item18) had item-scale correlations below 0.40, whereas all the other corrected item-scale correlation values were above 0.40 (Nunally, 1978). At this early point, however, no items were deleted. Many scholars suggest more strict criteria (e.g. item-scale correlations should exceed 0.50 (Churchill, 1979)), however, these were not adopted at such an early stage of scale development. The reason being it was preferable to retain the items at this stage and remove them later if they perform consistently poor in subsequent stages of scale development.

**Table 19: Item Analysis**

| | Mean | Std. Deviation | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Scale Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|---|---|
| item1 | 5.58 | 1.38 | 155.74 | 488.45 | 0.65 | 0.93 |
| item2 | 5.4 | 1.40 | 155.92 | 491.63 | 0.58 | 0.94 |
| item3 | 3.35 | 2.04 | 157.97 | 486.10 | 0.44 | 0.94 |
| item4 | 4.91 | 1.69 | 156.41 | 485.22 | 0.56 | 0.94 |
| item6 | 6.3 | 0.96 | 155.02 | 509.13 | 0.46 | 0.94 |
| item7 | 5 | 1.54 | 156.33 | 492.76 | 0.51 | 0.94 |
| item8 | 5.16 | 1.58 | 156.16 | 492.92 | 0.49 | 0.94 |
| item11 | 5.25 | 1.48 | 156.07 | 493.27 | 0.52 | 0.94 |
| item12 | 6.28 | 0.92 | 155.04 | 506.48 | 0.55 | 0.94 |
| item13 | 5.62 | 1.21 | 155.70 | 496.19 | 0.60 | 0.94 |
| item14 | 6.2 | 1.03 | 155.13 | 502.16 | 0.58 | 0.94 |
| item15 | 5.54 | 1.34 | 155.78 | 488.21 | 0.67 | 0.93 |
| item16 | 5.79 | 1.30 | 155.53 | 493.95 | 0.59 | 0.94 |
| item18 | 6.54 | 0.73 | 154.78 | 516.92 | 0.38 | 0.94 |
| item19 | 6.01 | 1.03 | 155.31 | 501.17 | 0.60 | 0.94 |
| item20 | 5.11 | 1.53 | 156.22 | 485.38 | 0.62 | 0.93 |
| item21 | 6.51 | 0.79 | 154.81 | 512.14 | 0.48 | 0.94 |
| item22 | 5.63 | 1.32 | 155.70 | 494.32 | 0.58 | 0.94 |
| item24 | 6.2 | 0.97 | 155.13 | 504.85 | 0.55 | 0.94 |
| item25 | 5.85 | 1.11 | 155.47 | 495.66 | 0.66 | 0.93 |
| item26 | 6.37 | 0.81 | 154.96 | 507.60 | 0.59 | 0.94 |
| item27 | 5.67 | 1.23 | 155.65 | 491.72 | 0.67 | 0.93 |
| item28 | 5.02 | 1.52 | 156.30 | 482.37 | 0.68 | 0.93 |
| item29 | 6.43 | 0.82 | 154.89 | 508.91 | 0.54 | 0.94 |
| item31 | 5.52 | 1.33 | 155.80 | 487.77 | 0.69 | 0.93 |
| item32 | 5.78 | 1.18 | 155.54 | 493.28 | 0.67 | 0.93 |
| item33 | 4.61 | 1.79 | 156.71 | 475.96 | 0.65 | 0.93 |
| item34 | 5.09 | 1.50 | 156.23 | 487.63 | 0.60 | 0.93 |
| item35 | 4.62 | 1.60 | 156.70 | 483.47 | 0.62 | 0.93 |

Having evaluated the performance of individual items, the analysis moved to its next stage which was conducting exploratory factor analysis on the calibration sample.

## 5.3 Exploratory Factor Analysis (EFA)

Exploratory factor analysis was conducted to obtain early dimensionality of the scale (Williams et al., 2010). Scale dimensionality is reflected in inter-item correlations (Furr, 2011) and EFA works on these correlations by grouping the items with high correlations together which forms a factor (or dimension). Economic rationale behind this is that strong correlation suggests a common core amongst the items (DeVellis, 2003). For this study, EFA was conducted using SPSS 19 on the calibration sample (nA=246). As discussed in the methodology chapter, conducting EFA requires careful consideration of various issues and making sound decisions at each step. Therefore, guided by the literature on EFA (Fabriger et al., 1999; Churchill, 1979; Hair et al., 2006; Field, 2009; Williams et al., 2010; Netemeyer, 2003), a four step approach was adopted to conduct EFA for this research. Figure 7 presents this approach.

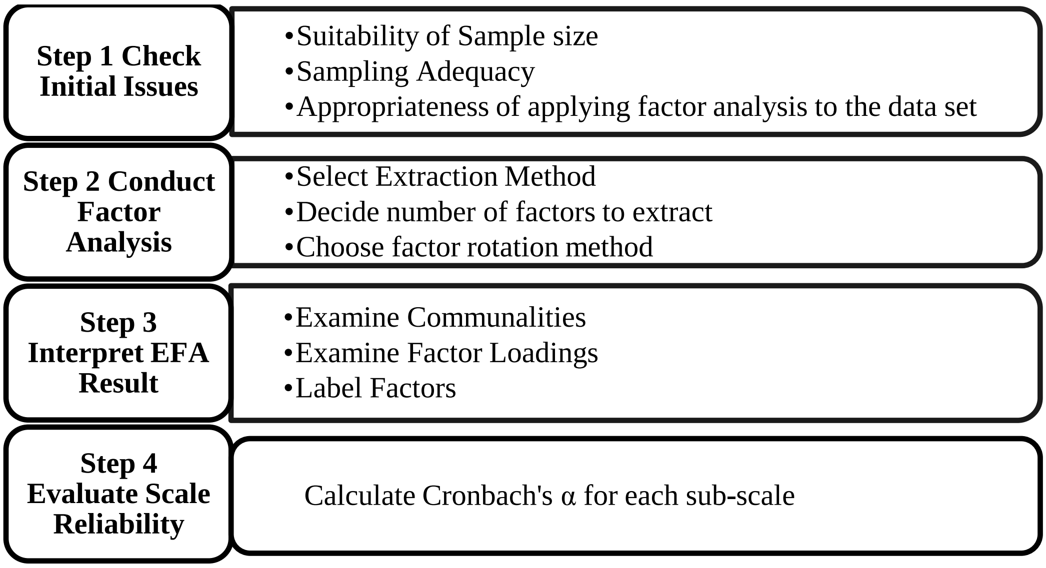


**Figure 7: Steps in conducting EFA**

### 5.3.1 Step 1: Check initial issues

Researchers suggest that before conducting EFA, it is important to check some initial issues like suitability of sample size (Field, 2009; Furr, 2011; Bryman &

Cramer, 2011), sampling adequacy (Field, 2009; Tabachinick & Fidell, 2001) and the appropriateness of applying factor analysis to the data set. (Hair et al., 2006). These issues were examined as follows:

**(a)** ***Suitability of sample size*** – Researchers provide various rules of thumb regarding the suitable sample size for conducting EFA. For example, Hair et al. (2006) states two rules of thumb to check sample size suitability: first, the number of observations in a sample must be more than the number of variables and second, the sample should not have fewer than 50 observations. There are other suggestions for sample size; for instance the sample should have five participants per variables (Bryman & Cramer, 2011; Gorsuch, 1983; Hair et al., 2006), and the sample should not have less than 100 participants for analysis (Gorsuch, 1983). In this study, the sample size of 246 clearly met all of the above criteria since it was greater than sample size of 50 and the number of observations (=246) were greater than the number of variables (=29). Hence this sample size was considered to be suitable for conducting EFA.

***(b) Sampling Adequacy*** – Two tests were conducted to check the sampling adequacy: Kaiser-Meyer-Olkin (KMO) statistic test and Bartlett test of sphericity (Bryman & Cramer, 2011; Hair et al., 2006).

*KMO Test* – the KMO test was conducted on the calibration sample to check the sampling adequacy. The KMO statistic varies between 0 and 1, where values close to 1 indicate that the factor analysis will produce distinct and reliable factors (Field, 2009). This test provided the value of .924 for the calibration sample, which can be regarded as 'meritorious' (Kaiser, 1960) or 'superb' (Hutcheson & Sofroniou, 1999).

*Bartlett Test of Sphericity* – This test examines the entire correlation matrix to ensure that the correlation matrix has significant correlations among at least some of the variables (Hair et al., 2006). For this study, Bartlett's test of sphericity provided a significant $\chi 2$ value of 4432.97 ($p<0.000$, df=378).

Thus, with the above two tests, it was concluded that the sample size was adequate for further analysis.

**(c)** ***Appropriateness of applying factor analysis to the data set*** – Next, the correlation matrix, anti-image correlation matrix and measures of sampling adequacy (MSA) were analyzed to ensure that the application of the factor analysis technique to the data set is appropriate.

*Correlation Matrix* – The correlation matrix depicting inter-item correlations was analyzed to identify any item(s) having consistently low and insignificant correlations with other items. The matrix is given in Appendix C. A visual inspection of the correlation matrix revealed that a substantial number of correlations were greater than 0.20 (Walsh & Beatty, 2007), indicating the appropriateness of applying factor analysis to the dataset (Hair et al., 2006). However, the inspection also revealed that one of the items (item3) had consistently low (<0.20) and insignificant ($p<0.05$) correlations with a large number of other items (10 out of 29), thus, making it a candidate for exclusion from factor analysis (Field, 2009). Item 3 (‘Celebrity endorsement associated with Brand X’) was included in the pool of items through data collected from customer interviews for exploratory purposes. There was no reference to celebrity endorsement in any of the brand identity frameworks included in this study (as discussed in Chapter 3, Table 3, p.79). Perhaps this is why this item was not found to be empirically associated with brand identity. In Churchill’s (1979, p.68) words, “*Low inter-item correlations indicate that some items are not drawn from the appropriate domain and are producing error and unreliability*.” Thus, based on these arguments, item 3 was excluded from further analysis.

*Anti-image correlation matrix and MSA* – The diagonals in the Anti-image correlation matrix represents measures of sampling adequacy (MSA) for each item which should be greater than 0.5, whereas off-diagonals represent the negatives of partial correlation which should be very small (Field, 2009) and not above 0.70 (Hair et al., 2006). Based on these criteria, this matrix (given in Appendix D) was examined and it showed that all the off-diagonal values were below 0.70 indicating the appropriateness of applying factor analysis to the data. All the diagonal values were above 0.80 which was considered to be meritorious (Hair et al., 2006).

To summarize, the correlation matrix, anti-image matrix and MSA tests provided the desired results thereby confirming the suitability of the application of factor analysis to the calibration sample. Item3 was excluded from further analysis based on its consistently low and insignificant correlation with other items.

### 5.3.2 Step 2: Conduct Exploratory Factor Analysis (EFA)

In step 2, EFA was conducted to identify the underlying structure of relationships among the variables (Williams et al. 2010). This involved making three important decisions: (a) choosing the factor extraction method, (b) deciding on the number of factors to be extracted (Hair et al. 2006) and (c) choosing an appropriate factor rotation method.

**(a)** ***Choosing Factor Extraction Method*** - The two most widely used factor extraction methods are: Principal Component Analysis (PCA) and Principal Axis Factoring (PAF) (Hair et al., 2006, p.118). PCA gives a factor model in which the factors are based on the total variance whereas in PAF, factors are based only on the common variance, with specific and error variance excluded (Hair et al., 2006, p.102). PCA was chosen over PAF for three reasons. First, PCA is conceptually less complex than PAF and is a psychometrically sound procedure (Field, 2009). It is a recommended approach when no prior theory or model exists (Williams et al., 2010). Second, it is recommended to use PCA when establishing preliminary solutions using EFA (Pett et al., 2003). Third, PCA is the most commonly used factor extraction method and has been widely used in the Marketing literature for developing scales (e.g. Yoo & Donthu, 2001; El Manstrly & Harrison, 2013). Lastly, it was noticed that several evidences (Field, 2009; Hair et al., 2006; Stevens, 2009; Guadagnoli & Velicer, 1988) suggest that it is highly unlikely to get different solutions with PCA and PAF if the number of items or variables is more than 30 and if the communalities are greater than 0.60 for most of the items;

however, differences can occur if there are less than 20 items and any communalities are below 0.4 (Field, 2009).

In this sample there were 28 items (after exclusion of item3) which can be considered as relatively closer to 30 and well above the lower level of 20. All the communalities were examined and most of them were well above 0.60 (only five out of twenty eight were slightly below, ranging from 0.50 to 0.54); none of the communalities were below 0.40. Thus, it was assumed that both extraction methods will yield similar results. As a final check, both PCA and PAF were conducted on the sample and very similar results were yielded from both. However, PCA was giving theoretically more meaningful results. Thus, for the reasons mentioned above, principal components analysis was used to extract the factors.

**(b)** ***Number of factors to extract*** – The next decision was regarding the number of factors to be extracted. Kaiser's criterion (Latent root), percentage of variance criterion and scree plot were used to decide this (Hair et al., 2006; Field, 2009; Stevens, 2009). Kaiser's criteria is the most widely used criterion to select the number of factors and is considered to be most reliable if the number of items is between 20 and 50 (Hair et al., 2006, p.120). Thus, using this criterion, five factors with eigenvalue greater than 1 were retained (Table 20). Percentage of variance criteria was used to ensure practical significance of these five factors. These five factors explained 67.62% variance which can be considered as satisfactory in social sciences (Hair et al., 2006). A graphical method, called the scree plot was also used to determine the number of factors to extract (Fabrigar et al., 1999). However, the scree plot for the sample showed inflections that justified retaining four or five factors (shown in Figure 8). This led to ambiguity in interpreting the right number of factors. Thus, given the accuracy of Kaiser's criterion for 30 items and adequacy of percentage of variance criterion and their convergence on five factors, this was the number of factors that were finally retained for further analysis.

**Table 20: Total Variance Explained**

| Component | Initial Eigenvalues | | | Rotation Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 10.56 | 40.60 | 40.60 | 5.54 | 21.30 | 21.30 |
| 2 | 3.08 | 11.85 | 52.45 | 3.68 | 14.17 | 35.47 |
| 3 | 1.68 | 6.46 | 58.91 | 3.53 | 13.58 | 49.04 |
| 4 | 1.20 | 4.62 | 63.53 | 2.55 | 9.82 | 58.86 |
| 5 | 1.06 | 4.09 | 67.62 | 2.28 | 8.76 | 67.62 |
| 6 | 0.87 | 3.35 | 70.98 | | | |
| 7 | 0.74 | 2.85 | 73.82 | | | |
| 8 | 0.65 | 2.49 | 76.32 | | | |
| 9 | 0.63 | 2.44 | 78.75 | | | |
| 10 | 0.60 | 2.30 | 81.05 | | | |
| 11 | 0.48 | 1.86 | 82.91 | | | |
| 12 | 0.46 | 1.76 | 84.67 | | | |
| 13 | 0.43 | 1.64 | 86.31 | | | |
| 14 | 0.41 | 1.59 | 87.90 | | | |
| 15 | 0.39 | 1.50 | 89.40 | | | |
| 16 | 0.34 | 1.31 | 90.71 | | | |
| 17 | 0.33 | 1.25 | 91.96 | | | |
| 18 | 0.32 | 1.23 | 93.19 | | | |
| 19 | 0.30 | 1.16 | 94.35 | | | |
| 20 | 0.28 | 1.09 | 95.44 | | | |
| 21 | 0.24 | 0.92 | 96.35 | | | |
| 22 | 0.22 | 0.86 | 97.21 | | | |
| 23 | 0.21 | 0.80 | 98.01 | | | |
| 24 | 0.19 | 0.71 | 98.72 | | | |
| 25 | 0.18 | 0.68 | 99.40 | | | |
| 26 | 0.16 | 0.60 | 100.00 | | | |

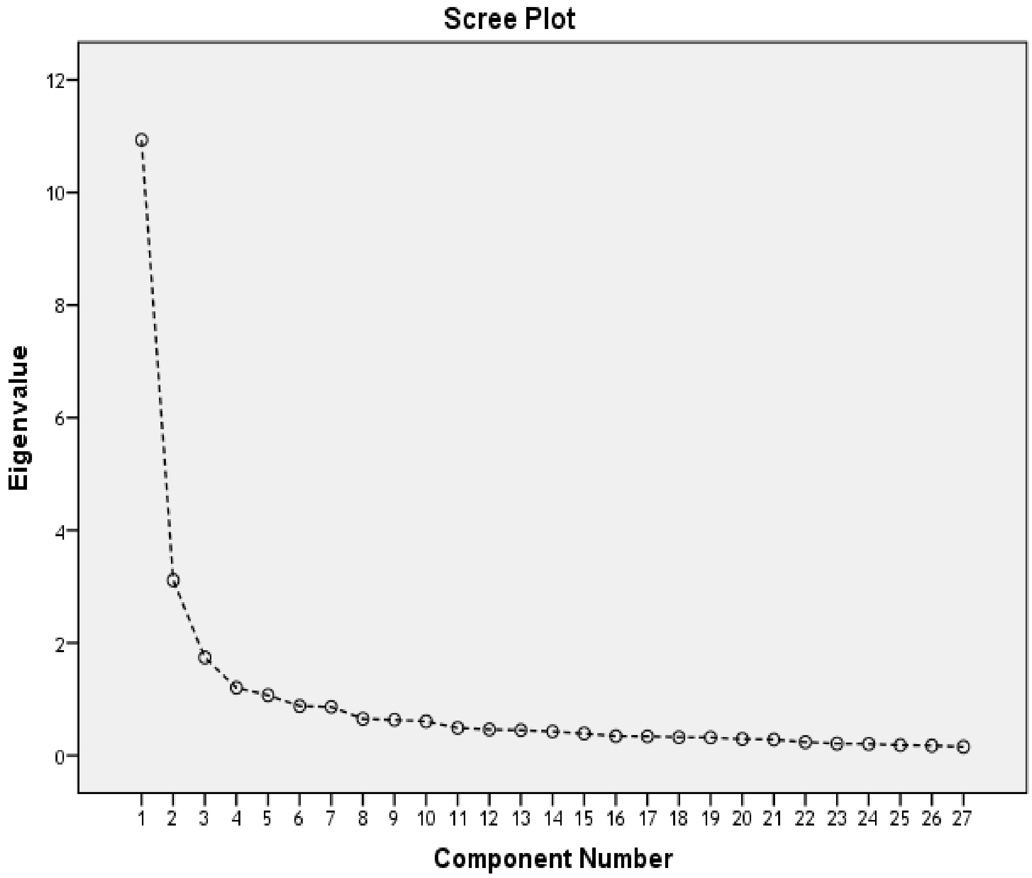


**Figure 8: Scree Plot**

**(c)** ***<u>Factor Rotation Method</u>*** – After deciding factor extraction method, the next step was to rotate the factors to improve their interpretability (Field, 2009; Stevens, 2009). A rotational method is employed to achieve a simpler and theoretically more meaningful factor solution (Hair et al., 2006). There are two major classes of rotation: Orthogonal (that produces uncorrelated factors; e.g Varimax) and Oblique (that produces correlated factors; e.g. Promax) (Furr, 2011; Stevens, 2009). Orthogonal rotations are the most widely used rotational methods (Hair et al., 2006, p.127). For the purpose of this study, orthogonal varimax rotation was adopted since it provides a clear separation of the factors (Hair et al., 2006) and thus, provides easier interpretation of results (Williams et al., 2010).

### 5.3.3 Step3: Interpret EFA results

**(a)** ***Examine Communalities*** – Table 21 shows communalities for all the items. Researchers suggest that communality for each item should be above 0.5 and those items that have communality less than this value should be eliminated from further analysis (Hair et al., 2006). Based on this recommendation, item18 was excluded from further analysis. This is because, the examination of values in Table 21 shows that communalities for all the items were above 0.5 except item18 which had communality of only 0.47.

**(b)** ***Examine Factor Loadings (Item-factor Association)*** – Factor loadings reflect the association between each variable and each factor (Hair et al., 2006). The factor loading matrix, shown in Table 22, containing the rotated factor loading of each variable on each factor was examined. Hair et al. (2006) suggest that for a sample of approximately 250, factor loadings of 0.5 and above can be considered as significant. Table 22 shows that all the factor loadings for this study were above 0.5, the lowest being 0.52 (item15 and 33) and hence these were considered as significant. There were no items with cross-loading. Only one item (item24) had no significant loading on any factor (it had a loading of 0.47 on factor 1 which was below the acceptable level of 0.50) and hence it was discarded from further analysis. Thus, all the variables (except item24) had at least one significant loading (>0.5); communality above 0.50; and none of the variables cross-loaded.

The analysis thus far showed that EFA provided a final solution in the form of a five-factor structure containing 26 items (item3, item18 and item24 were excluded due to low correlations, low communality and low factor loading respectively). This is shown in Table 21.

**Table 21: Communalities**

| | Initial | Extraction |
|---|---|---|
| item1 | 1.000 | .71 |
| item2 | 1.000 | .71 |
| item4 | 1.000 | .66 |
| item6 | 1.000 | .70 |
| item7 | 1.000 | .65 |
| item8 | 1.000 | .60 |
| item11 | 1.000 | .54 |
| item12 | 1.000 | .75 |
| item13 | 1.000 | .70 |
| item14 | 1.000 | .71 |
| item15 | 1.000 | .59 |
| item16 | 1.000 | .52 |
| item18 | 1.000 | .47 |
| item19 | 1.000 | .51 |
| item20 | 1.000 | .71 |
| item21 | 1.000 | .68 |
| item22 | 1.000 | .66 |
| item25 | 1.000 | .69 |
| item26 | 1.000 | .66 |
| item27 | 1.000 | .77 |
| item28 | 1.000 | .66 |
| item29 | 1.000 | .65 |
| item31 | 1.000 | .76 |
| item32 | 1.000 | .75 |
| item33 | 1.000 | .72 |
| item34 | 1.000 | .74 |
| item35 | 1.000 | .74 |

**Table 42: Rotated Factor Matrix**

| Item Description | Factor 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Item 6 The behaviour of staff delivering brand X | .81 | | | | |
| Item12 The expertise of staff working for brand X | .84 | | | | |
| Item 14 The quality of interaction with staff delivering brand X | .72 | | | | |
| Item16Your relationship with the people providing brand X | .54 | | | | |
| Item19Your relationship with brand X | .57 | | | | |
| Item 21 The quality of the service provided by brand X | .79 | | | | |
| Item26The quality of the delivery of brand X | .74 | | | | |
| Item29The consistency of service of brand X | .77 | | | | |
| Item25The values projected by brand X | | .62 | | | |
| Item28Public Relations (PR) activities associated with brand X | | .67 | | | |
| Item 31 The company vision associated with brand X | | .78 | | | |
| Item 33 Your relationship with other customers using brand X | | .52 | | | |
| Item 34 The social responsibility projected by brand X | | .81 | | | |
| Item35The customers who buy brand X | | .58 | | | |
| Item 1 The name of brand X | | | .75 | | |
| Item 2 The logo or symbols used to identify brand X | | | .77 | | |
| Item 7 The colour(s) associated with brand X | | | .76 | | |
| Item8 The country of origin of brand X | | | .68 | | |
| Item15The company culture associated with brand X | | | .52 | | |
| Item 13 The appearance of the delivery environment used by brand X | | | | .67 | |
| Item 27 The ambience in brand X's delivery environment | | | | .70 | |
| Item 32 The general environment in which brand X is delivered | | | | .65 | |
| Item4The advertising used by brand X | | | | | .53 |
| Item11The word-of-mouth communication from other consumers (face-to-face or social media) related to brand X | | | | | .62 |
| Item 20 Promotions carried out by brand X | | | | | .72 |
| Item 22 The value-added benefits offered by brand X | | | | | .66 |

**(c)** ***Label Factors*** – In order to provide meaning to each factor, a label was given to each based on the core theme shared by its items (Field, 2009). Before labelling the factors, consideration was given to the feedback from the expert panel process as well suggestions received during presentation of this research at various international conferences attended by the researcher. These suggestions were provided by academics and researchers in the field of Marketing. Moreover, the PhD supervisors were also involved in this process to provide suggestions and review the final labels.

The first factor that accounted for the maximum variance adhered to its initial conceptualization. This factor contained all the items that were under the *Brand-as-Service Process* dimension of service brand identity. For simplicity purpose and to add more meaning to the dimension label, this factor was re-labeled as *Process Identity (PI)*. The second factor had items relating to the organizational aspects of a service brand, for example, values projected by the brand, social responsibility initiatives of the organization, public relations activities etc. Thus, considering the overall pattern represented by these items, the second factor was labeled *Organization Identity (OI)*. The third factor incorporated items that are related to the symbolic aspects of the brand, for example, name, logo, colour etc. Thus, this factor was labeled *Symbolic Identity (SyI)*. The fourth factor contained three items that belonged to the initial dimensions of brand-as-servicescape. Thus, this factor was re-labeled as *Servicescape Identity (SI)*. The fifth, and the last factor contained items related with the communication aspects that can contribute in brand identity building. This factor was labeled as *Communication Identity (CI)*.

Now that the final scale was established through EFA, it was deemed necessary to evaluate its reliability. This is discussed in the next section.

### 5.3.4 Step 4: Evaluate Scale Reliability

As discussed in the methodology chapter, the reliability of the scale was assessed by calculating Cronbach's alpha for each sub-scale (Parasuraman et al., 1988).

***Calculate Cronbach's α*** – Following Churchill (1979), the reliability coefficient (Cronbach's α) was calculated for each sub-scale (factor 1 to 5). Table 23 to Table 27 shows that Cronbach's α was above 0.70 (Hair et al., 2006) for all sub-scales, indicating high reliability of the scale. Also, except item 13, none of the other items indicated that their deletion will lead to an increase in the value of Cronbach's alpha (see column 'Cronbach's alpha if item deleted' column in each table. Its value is lower than the overall alpha for the sub-scale). Since removal of item 13 would not lead to any significant increase in Cronbach's alpha value (it would increase α only by 0.02), this item was not removed at this early stage of analysis and would be observed if in further analysis if it performs poorly (Hair et al. 2006). Thus, the internal consistency of the scale was established.

**Table 23: Scale Reliability analysis for factor 1 'PI'**

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|
| item6 | 43.57 | 27.78 | .70 | .89 |
| item12 | 43.59 | 27.33 | .79 | .88 |
| item14 | 43.67 | 26.87 | .74 | .89 |
| item16 | 44.08 | 25.57 | .65 | .90 |
| item19 | 43.86 | 27.70 | .65 | .89 |
| item21 | 43.36 | 29.27 | .69 | .89 |
| item26 | 43.50 | 28.88 | .72 | .89 |
| item29 | 43.44 | 28.72 | .72 | .89 |
| | | | | **Cronbach's Alpha for *PI* sub-scale = 0.90** |

**Table 24: Scale Reliability analysis for factor 2 ‘OI’**

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|
| item25 | 24.87 | 41.42 | .58 | .89 |
| item28 | 25.70 | 35.32 | .74 | .86 |
| item31 | 25.20 | 37.12 | .75 | .86 |
| item33 | 26.11 | 33.11 | .71 | .87 |
| item34 | 25.63 | 35.40 | .75 | .86 |
| item35 | 26.10 | 34.63 | .73 | .86 |
| | | | | **Cronbach’s Alpha for *OI* sub-scale = 0.89** |

**Table 25: Scale Reliability analysis for factor 3 ‘SyI’**

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|
| item1 | 21.09 | 20.66 | .74 | .78 |
| item2 | 21.27 | 21.01 | .69 | .79 |
| item7 | 21.68 | 20.64 | .63 | .81 |
| item8 | 21.52 | 20.93 | .58 | .82 |
| item15 | 21.14 | 22.63 | .58 | .82 |
| | | | | **Cronbach’s Alpha for *SyI* sub-scale = 0.84** |

**Table 26: Scale Reliability analysis for factor 4 ‘SI’**

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|
| item13 | 11.45 | 5.16 | .64 | .87 |
| item27 | 11.39 | 4.54 | .78 | .74 |
| item32 | 11.29 | 4.80 | .76 | .76 |
| | | | | **Cronbach’s Alpha for *SI* sub-scale = 0.85** |

**Table 27 Scale Reliability analysis for factor 5 ‘CI’**

| | Scale Mean if Item Deleted | Scale Variance if Item Deleted | Corrected Item-Total Correlation | Cronbach's Alpha if Item Deleted |
|---|---|---|---|---|
| item4 | 15.98 | 12.00 | .52 | .72 |
| item11 | 15.65 | 13.49 | .49 | .73 |
| item20 | 15.79 | 11.71 | .66 | .63 |
| item22 | 15.27 | 13.85 | .55 | .70 |
| | | | | **Cronbach’s Alpha for *CI* sub-scale = 0.75** |

## 5.4 Confirmatory Factor Analysis

The previous section described and discussed the steps taken to conduct exploratory factor anaylsis (EFA). EFA was conducted on 26 items in the calibration sample. Based on the eigenvalues, percentage of variance explained and pattern of factor loadings, a five-factor structure was deemed most appropriate. These factors were named: *Process Identity, Organization Identity, Symbolic Identity*, *Servicescape Identity* and *Communication Identity*.

The purpose of EFA was to identify an appropriate and theoretically meaningful factor structure and thus it acted as more of a theory-testing procedure (Stevens, 2009). Confirmatory Factor Analysis (CFA), on the other hand, provided a means to validate the results obtained from EFA and to assess their replicability (Hair et al., 2006). For this purpose, CFA was also conducted on the calibration sample.

Before conducting CFA, the suitability of the sample size was assessed. There is considerable variation on the opinion regarding optimum sample size for CFA. However, researchers provide some broad guidelines to decide if the sample size is suitable for conducting the analysis. For example, Cattell (1978) suggests that the minimum sample size should be 250, whereas MacCallum et al. (1999) argue that if the communalities are in range of 0.5 then it is advisable to have a sample size between 100 to 200. Thus, considering these suggestions, the sample size of 246 in this study was deemed appropriate for conducting confirmatory factor analysis.

### 5.4.1 Model Specification and Estimation

As a first step in conducting CFA, an initial measurement model was generated using AMOS 21.0.0. This model was based on the five factor solution obtained from EFA. It employed path diagrams to depict the relationships between each variable and its corresponding factor. Figure 9 shows the initial measurement model representing the rotated factor matrix that was shown in Table 22. In this Figure 9, the boxes (labeled as item1, item2, item6 and so on) represent the *observed* variables that are used to generate various statistics like correlations, covariances etc. (Child, 2006). The elliptical circles contain latent variables labeled after the factors discovered from EFA. The symbol e1 to e26 in small circles represent the error term. The path between error term and observed variables stands for the link between unique variance and the variable (item) (Child, 2006). Following Hair et al. (2006), all the latent variables (i.e. factors) were allowed to co-vary. This is represented in Figure 9 by showing a double headed arrow between each pair of factors. The latent variables were labeled as PI (for Process Identity), OI (for Organization Identity), SyI (for Symbolic Identity), SI (for Servicescape Identity) and CI (for Communication Identity) as shown in Figure 9. This five factor initial measurement model was estimated using AMOS.

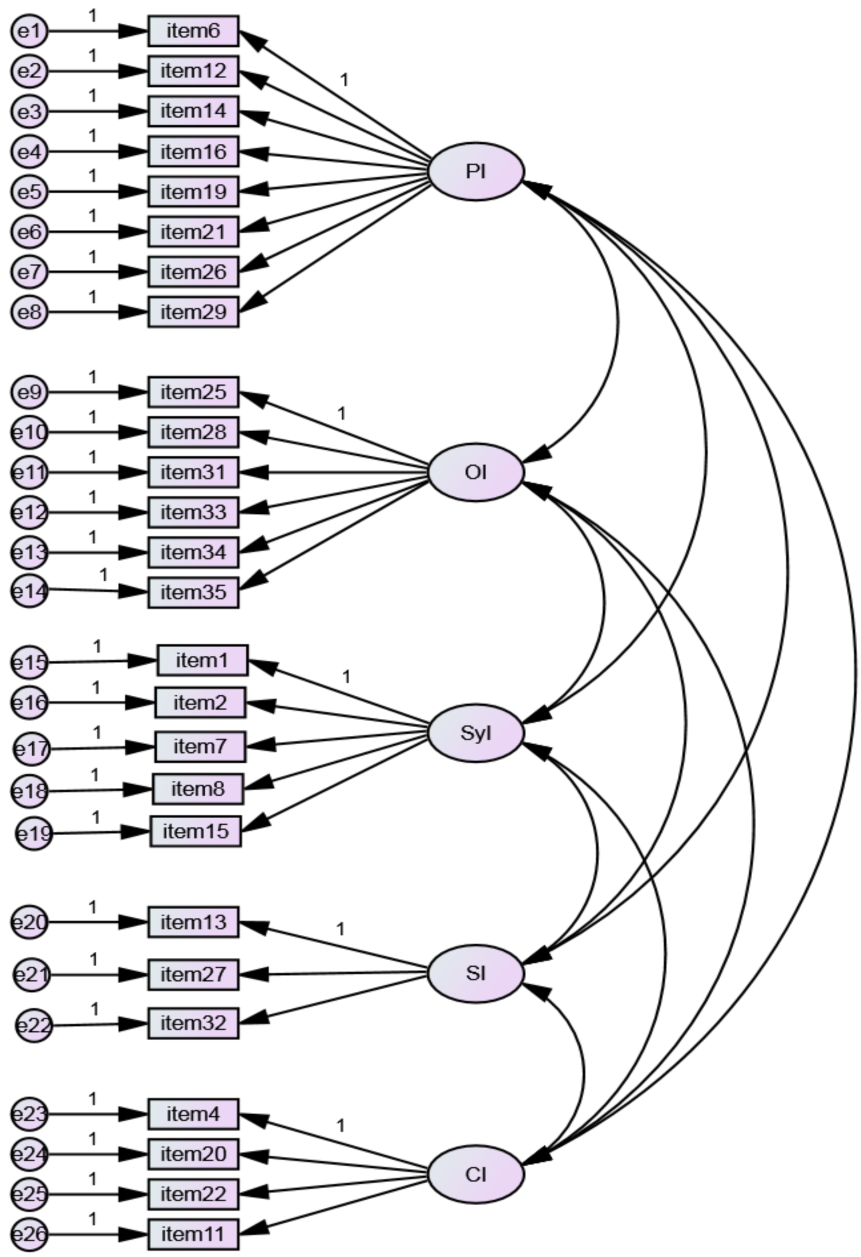


**Figure 9: Initial Measurement Model**

***Fit Indices*** – The fit indices were examined to assess the overall adequacy of the initial measurement model (in Figure 9) (Furr, 2011). The most commonly examined fit indices are: chi-square or CMIN, Goodness of Fit Index (GFI), the Comparative Fit Index (CFI), the Root Mean Square of Approximation (RMSEA), the Root Mean Square Residual (RMR), and the Standardized Root Mean Square Residual (SRMR) (Hair et al., 2006; Furr, 2011; Walsh & Beatty, 2007).

Following Hair et al.'s (2006) recommendation, both incremental index (CFI and TLI) and absolute index (GFI, RMSEA and SRMR) were assessed. In addition to this, $\chi^2$ value and the associated degrees of freedom were also examined (MacCallum et al., 1992). These fit indices have differing scales and norms for indicating model adequacy (Hair et al., 2006). For the initial measurement model (Figure 9), the fit indices values are provided in Table 28. Comparison of each fit index value with the benchmark value indicated that the initial measurement model was not adequate and had a poor overall fit with the data. Therefore, this warranted further examination of the modification indices, standardized residuals, and standardized regressions weights to make possible revisions to the model and re-specify it for estimation (MacCallum et al., 1992; Hair et al., 2006; Furr, 2011).

**Table 28: Fit indices for Measurement Model 1**

| Fit index | Value | Benchmark |
|---|---|---|
| Chi-Square/df (cmin/df) | 3.11 | < 3 good |
| CFI | .85 | > .95 |
| GFI | .76 | > .90 |
| AGFI | .71 | > .80 |
| SRMR | .87 | < .08 |
| RMSEA | .09 | < .05 good; .05-.10 moderate |
| TLI | .83 | > .90 |
| PNFI | .70 | |

### 5.4.2 Model Re-specification

A sequential model modification approach (MacCallum et al., 1992) was adopted for re-specifying the model to improve its overall fit. This approach involved freeing a parameter at each step so as to produce the largest improvement in fit, and then continuing this process until adequate fit is achieved (MacCallum et al., 1992). Following Hair et al.'s (2006) suggestions, decisions regarding model re-specification were based on three main criteria: standardized regression weights (or estimated loadings), standardized residuals, and modification indices.

All the standardized regression weights were examined to check that they were above the acceptable level of 0.6. Only item11 had a loading of 0.57 which was towards the lower end. However, other parameters related with this item were assessed before making any decision regarding its inclusion or exclusion from further analysis.

Modification indices were examined to check if there were any items with cross loadings (Joreskog & Sorbom, 1988; Sin et al., 2005; Yoo & Donthu, 2001) whilst if standardized residuals were greater than |4.0| (Hair et al., 2006; Joreskog & Sorbom, 1988) items would have been considered candidates for removal. This is because large residuals indicate misspecification of the model (Byrne, 2001). Hair et al. (2006) also suggest that the standardized residual values between |2.5| and |4.0| must be examined and the corresponding item may be a candidate for removal if it has other problems associated with it (for e.g. low loadings, or cross-loadings).

Although these criteria guided the process of model re-specification, any decision regarding the removal of an item was undertaken in consultation with theory (McDonald & Ho, 2002) to prevent the problem of 'capitalisation by chance' (MacCallum, 1992).

Guided by the above rationale, items 4, 11, 15, 16, 19, 25, 26, 28, and 35 became candidates for exclusion from the measurement model. Following several authors' advice (MacCallum, 1995; McDonald & Ho, 2002) the logic for removing each item is provided. Item 16 had high standardized residual values (above |2.5|) and low loading (0.59). Items 4, 15, 11, 25, 28 and 35 had high standardized residual (between |2.5| and |4.0|), cross loadings and removing them improved the overall model fit significantly. Items 19 and 26 cross loaded onto other factors. Item 11 had low standardized residual value (below 0.60) and removing this item improved the model fit. Table 28 (a) provides the effect of removing these items on the overall model fit.

**Table 28 (a) Iterative removal of items and its impact on the overall model fit**

| Iteration | Item | Effect on Model Fit | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| (It.) No. | Removed | Cmin/df | CFI | GFI | SRMR | RMSEA | AGFI | TLI | PNFI |
| 1st It. | Item 4 | 3.08 | .85 | .77 | .086 | .092 | .72 | .83 | .71 |
| 2nd It. | Item 16 | 2.95 | .87 | .79 | .086 | .089 | .74 | .84 | .71 |
| 3rd It. | Item 19 | 3.03 | .87 | .79 | .082 | .091 | .74 | .85 | .71 |
| 4th It. | Item 25 | 2.75 | .89 | .82 | .071 | .084 | .77 | .88 | .73 |
| 5th It. | Item 28 | 2.84 | .89 | .85 | .069 | .087 | .79 | .88 | .72 |
| 6th It. | Item 35 | 2.62 | .90 | .84 | .068 | .081 | .79 | .89 | .73 |
| 7th It. | Item 26 | 2.61 | .91 | .85 | .067 | .081 | .81 | .89 | .72 |
| 8th It. | Item 15 | 2.66 | .91 | .86 | .061 | .082 | .82 | .89 | .71 |
| 9th It. | Item 11 | 2.15 | .95 | .91 | .05 | .07 | .86 | .93 | .68 |

After making the above changes, the initial measurement model was re-specified into measurement model 2 (shown in Figure 10) which was again estimated using AMOS. Measurement Model 2 demonstrated a noticeable improvement in fit over the initial measurement model. All the fit indices for this model were examined to see if it fits the data. Table 29 provides values of all the fit indices and suggests that the model had a good and acceptable overall fit (Hu & Bentler, 1999).

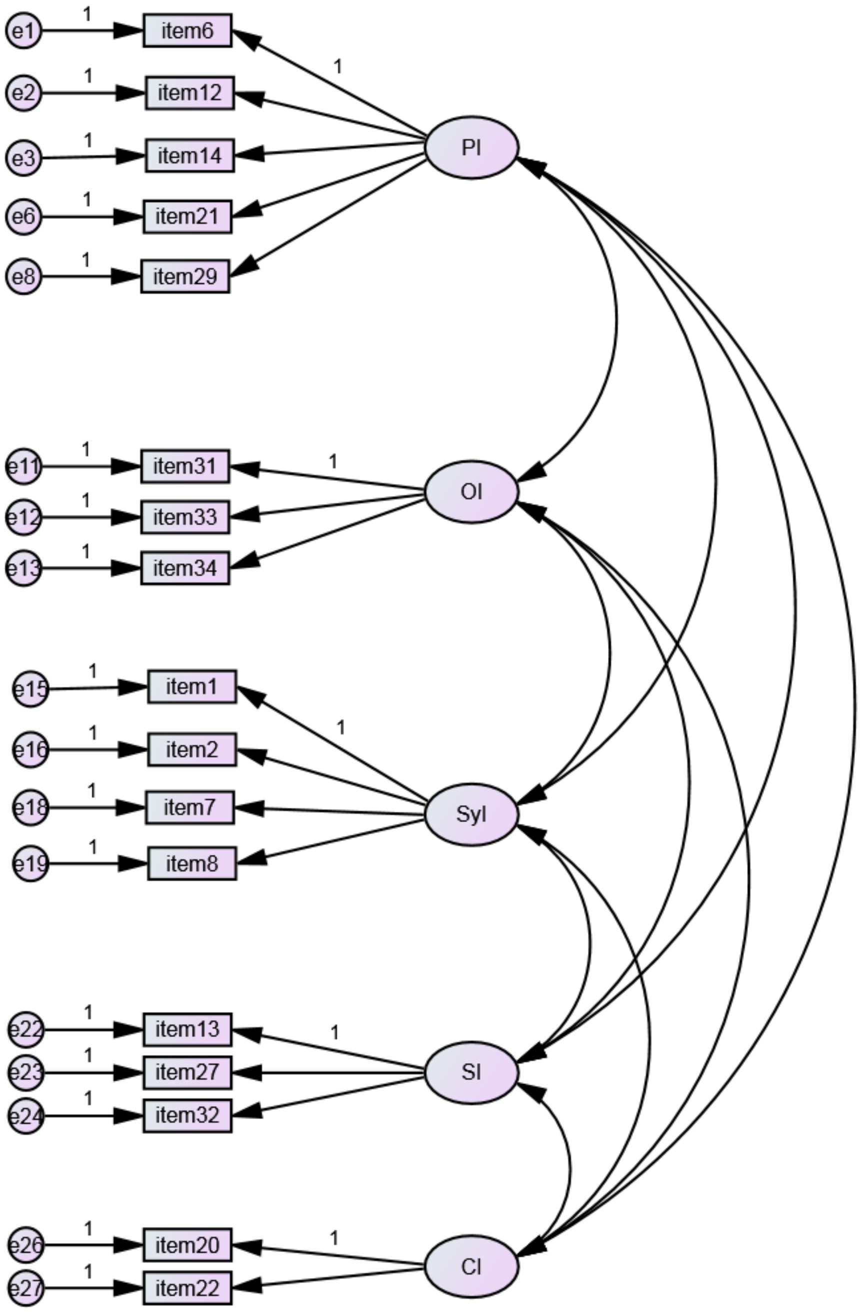


**Figure 10: Measurement Model 2**

**Table 29: Fit Indices for Calibration Sample M-Model 2**

| Fit index | Calibration Sample | Benchmark |
|---|---|---|
| Chi-Square/df (cmin/df) | 2.15 | < 3 |
| CFI | .95 | > .95 |
| GFI | .91 | > .95 |
| AGFI | .86 | > .80 |
| SRMR | .05 | < .09 |
| RMSEA | .07 | < .05 -.10 |
| PCLOSE | .01 | > .05 |
| TLI | .93 | > .90 |
| PNFI | .68 | |
| NFI | .91 | |
| RFI | .88 | |

At this stage, modification indices for measurement model 2 did not indicate any meaningful change that could further enhance the model fit. Thus, this model was considered as the final model on calibration sample, having a good fit and theoretical interpretability.

The standardized regression weights were then examined to ascertain their significance. Table 30 provides the details. All the standardized loadings were above 0.60 indicating their statistical significance. Apart from this, the unstandardized loadings (given in Table 31) were also examined. For all items, t-values were significant ($p<0.001$) which established the statistical significance of each loading.

**Table 30: Standardized Regression Weights: (Measurement Model 2)**

| Item | | Dimension | Standardized Loading |
|---|---|---|---|
| item6 | <--- | PI | .75 |
| item12 | <--- | PI | .79 |
| item14 | <--- | PI | .72 |
| item21 | <--- | PI | .78 |
| item29 | <--- | PI | .82 |
| item31 | <--- | OI | .76 |
| item33 | <--- | OI | .84 |

| Item | | Dimension | Standardized Loading |
|---|---|---|---|
| item34 | <--- | OI | .68 |
| item1 | <--- | SyI | .86 |
| item2 | <--- | SyI | .81 |
| item7 | <--- | SyI | .72 |
| item8 | <--- | SyI | .64 |
| item13 | <--- | SI | .69 |
| item27 | <--- | SI | .88 |
| item32 | <--- | SI | .87 |
| item20 | <--- | CI | .81 |
| item22 | <--- | CI | .74 |

**Table 31: Unstandardized Regression Weights (Measurement Model 2)**

| Item | | Dimension | Estimate | S.E. | t-value | P |
|---|---|---|---|---|---|---|
| item6 | <--- | PI | 1.00 | | | |
| item12 | <--- | PI | 1.00 | .07 | 15.24 | *** |
| item14 | <--- | PI | 1.03 | .09 | 11.59 | *** |
| item21 | <--- | PI | .86 | .08 | 11.33 | *** |
| item29 | <--- | PI | .93 | .08 | 11.75 | *** |
| item31 | <--- | OI | 1.00 | | | |
| item33 | <--- | OI | 1.5 | .15 | 10.22 | *** |
| item34 | <--- | OI | 1.01 | .09 | 11.21 | *** |
| item1 | <--- | SyI | 1.00 | | | |
| item2 | <--- | SyI | .96 | .08 | 11.80 | *** |
| item7 | <--- | SyI | .94 | .08 | 11.22 | *** |
| item8 | <--- | SyI | .85 | .09 | 9.24 | *** |
| item13 | <--- | SI | 1.00 | | | |
| item27 | <--- | SI | 1.29 | .11 | 12.26 | *** |
| item32 | <--- | SI | 1.22 | .10 | 12.12 | *** |
| item20 | <--- | CI | 1.00 | | | |
| item22 | <--- | CI | .79 | .08 | 9.79 | *** |

***p<0.001

## 5.5 Scale Validation and Psychometric Properties (on Validation sample)

The preceding section discussed the development of the final measurement model using the calibration sample. This model was developed through an iterative process of model modification based on theory and the data (MacCallum et al., 1992; Furr, 2011; Hair et al., 2006). Three key sets of results, viz. parameter estimates, fit indices and modification indices were examined to achieve the final model.

In order to reject the concern that modifications were a result of chance characteristics of the sample i.e. capitalization on chance (MacCallum et al., 1992), this section shows that the model modifications and the final model generalize beyond the sample at hand. Such evidence was provided by cross-validation analysis of the final measurement model using the validation sample ($n_B$=245) (MacCallum et al., 1992).

### 5.5.1 Model Fit

The measurement model 2 generated from and tested on the calibration sample ($n_A$=246) was estimated on the validation sample to establish its generalizability and validity across samples. The model demonstrated adequate and acceptable levels of fit on the validation sample too. Table 32 reports the values of various fit indices that were examined. All the values adhere to the benchmarks and hence the model was considered to have a good fit on the validation sample.

**Table 52: Fit Indices for Validation Sample (n=245)**

| Fit index | CalibrationSample | Benchmark |
|---|---:|---:|
| Chi-Square/df (cmin/df) | 2.008 | < 3 good |
| CFI | .96 | > .95 great; > .90 traditional |
| GFI | .91 | > .95 |
| AGFI | .87 | > .80 |
| SRMR | .05 | < .09 |
| RMSEA | .06 | < .05 good; .05-.10 moderate |
| TLI | .94 | |
| PNFI | .69 | |
| RFI | .89 | |

### 5.5.2 Standardized Regression Weights

Next, the standardized regression weights were examined. All the loadings except one were above the recommended level of 0.50 (Table 33). Standardized loading for item8 was 0.48 which was marginally below 0.50. However, the unstandardized regression weights estimates (Table 34) showed that the loading for item8 was statistically significant ($p<0.001$) and thus could be accepted. t-values for unstandardized loadings ranged from 6.86 to 12.72 indicating that all the loadings were highly significant on the hypothesized factors.

**Table 33: Standardized Regression Weights: (Validation Sample)**

| Item | | Dimension | Estimate |
|---|---|---|---|
| item6 | <--- | PI | 0.63 |
| item12 | <--- | PI | 0.68 |
| item14 | <--- | PI | 0.71 |
| item21 | <--- | PI | 0.83 |
| item29 | <--- | PI | 0.84 |
| item31 | <--- | OI | 0.97 |
| item33 | <--- | OI | 0.79 |
| item34 | <--- | OI | 0.74 |
| item1 | <--- | SyI | 0.81 |
| item2 | <--- | SyI | 0.81 |
| item7 | <--- | SyI | 0.79 |
| item8 | <--- | SyI | 0.48 |
| item13 | <--- | SI | 0.72 |
| item27 | <--- | SI | 0.82 |
| item32 | <--- | SI | 0.84 |
| item20 | <--- | CI | 0.71 |
| item22 | <--- | CI | 0.91 |

**Table 34: Unstandardized Regression Weights: (Validation Sample)**

| Item | | Dimension | Estimate | S.E. | t-values | P |
|---|---|---|---|---|---|---|
| item6 | <--- | PI | 1 | | | |
| item12 | <--- | PI | 1.07 | 0.09 | 11.45 | *** |
| item14 | <--- | PI | 1.15 | 0.10 | 11.69 | *** |
| item21 | <--- | PI | 0.94 | 0.10 | 9.94 | *** |
| item29 | <--- | PI | 1.21 | 0.12 | 9.98 | *** |
| item31 | <--- | OI | 1 | | | |
| item33 | <--- | OI | 1.07 | 0.09 | 11.62 | *** |
| item34 | <--- | OI | 0.84 | 0.07 | 12.72 | *** |
| item1 | <--- | SyI | 1 | | | |
| item2 | <--- | SyI | 1.06 | 0.10 | 11.17 | *** |
| item7 | <--- | SyI | 1.24 | 0.12 | 10.50 | *** |
| item8 | <--- | SyI | 0.80 | 0.12 | 6.86 | *** |
| item13 | <--- | SI | 1 | | | |
| item27 | <--- | SI | 1.07 | 0.09 | 12.16 | *** |
| item32 | <--- | SI | 1.10 | 0.09 | 12.38 | *** |
| item20 | <--- | CI | 1 | | | |
| item22 | <--- | CI | 1.20 | 0.13 | 9.39 | *** |

***p<0.001

### 5.5.3 Scale Validity

Drawing on Hair et al. (2006), the validity of the scale was determined on the basis of two criteria: construct validity and nomological validity. The former includes discriminant and convergent validity. Moreover, the content validity of our scale was established through high inter-item correlations and results of our qualitative analysis. In addition, the scale's predictive validity was also assessed (Walsh & Beatty, 2007).

#### 5.5.3.1 Construct Validity

Construct Validity deals with the accuracy of measurement. It is the extent to which a set of measured items actually reflect the theoretical latent construct those items are designed to measure. Construct validity can be established through convergent validity, discriminant validity and predictive validity.

**Convergent Validity**

Following Hair et al. (2006), convergent validity was tested in three ways: i) by examining standardized item loadings, ii) by examining Average Variance Extracted (AVE) values, and iii) by assessing the construct reliability.

i) *Standardized item loadings* – Hair et al. (2006) suggest that most of the standardized loadings should be above 0.5 to indicate good convergent validity. Table 35 shows that all the loadings except one met this criterion. Thus the first test for convergent validity of the model was passed.

ii) *Average Variance Extracted (AVE)* – Hair et al. (2006) indicate that the average percentage of variance extracted (AVE) of 0.50 or higher is a good rule of thumb suggesting adequate convergence. In this sample, AVE for all factors was above 0.50 indicating adequate convergent validity (see Table 35). The following formula was used for computing AVE for each factor:

    AVE = Sum of Squared standardized factor loadings/ number of items loading on that factor

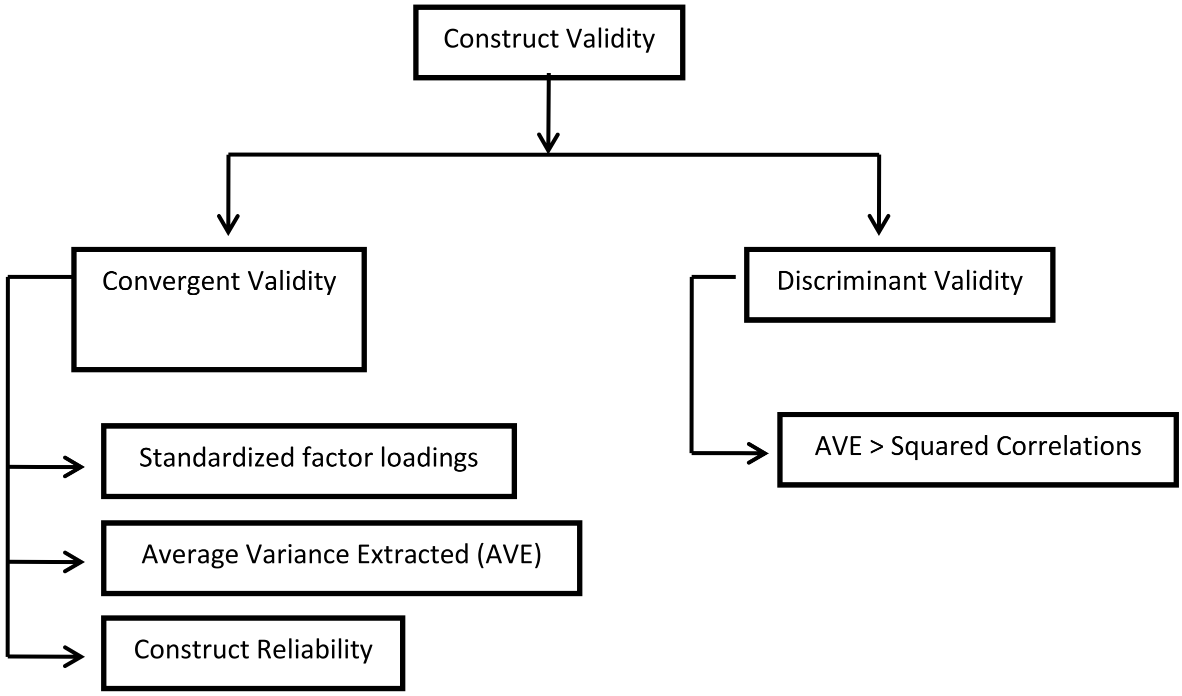


**Figure 11: Types of Validity**

iii) *Construct Reliability (CR)* – The third test to confirm construct validity involved assessing the construct reliability (CR) values of the model. CR was calculated using the following formula:

CR = Squared sum of standardized factor loadings / (Square of sum of standardized factor loadings + sum of the error variance terms for a construct)

Table 35 shows the CR values for each factor. All the values were above the recommended level of 0.7, indicating good convergent validity (Hair et al. 2007).

**Table 35: AVE and CR for Validation Sample**

| **Factor 1 PI** | **Standardized Loading ($\lambda$)** |
|---|---|
| Item6 | 0.63 |
| Item12 | 0.68 |
| Item14 | 0.71 |
| Item21 | 0.83 |
| Item29 | 0.84 |
| $\sum \lambda^2$ | 2.75 |
| **AVE ($\sum \lambda^2/5$)** | **0.55** |
| **CR** | **0.86** |
| **Factor 2 OI** | |
| item31 | 0.97 |
| item33 | 0.79 |
| item34 | 0.74 |
| $\sum \lambda^2$ | 2.10 |
| **AVE ($\sum \lambda^2/3$)** | **0.7** |
| **CR** | **0.87** |
| **Factor 3 SyI** | |
| item1 | 0.81 |
| item2 | 0.81 |
| item7 | 0.79 |
| item8 | 0.48 |
| $\sum \lambda^2$ | 2.15 |
| **AVE ($\sum \lambda^2/4$)** | **0.54** |
| **CR** | **0.82** |
| **Factor 4 SI** | |
| Item13 | 0.72 |
| Item27 | 0.82 |
| Item32 | 0.84 |
| $\sum \lambda^2$ | 1.89 |
| **AVE ($\sum \lambda^2/3$)** | **0.63** |
| **CR** | **0.84** |
| **Factor 4 CI** | |
| Item20 | 0.71 |
| Item22 | 0.91 |
| $\sum \lambda^2$ | 1.32 |
| **AVE ($\sum \lambda^2/2$)** | **0.66** |
| **CR** | **0.79** |

### Discriminant Validity

Discriminant validity among the dimensions of our scale was established by examining AVE for each latent variable and squared correlations between that latent variable and remaining factors. Individual AVE for each latent variable exceeded the squared correlation between other latent variables. All possible pairs of factors passed this test, suggesting the discriminant validity of the dimensions in the scale.

**Table 36 (a): Evidence of Discriminant Validity**

| Dimensions | Correlation Estimate | Squared correlation (SC) (pairwise) | Lowest AVE for the dimension pair** |
|---|---|---|---|
| OI <--> SyI | 0.62 | 0.38 | 0.54 (SyI) |
| OI <--> SI | 0.79 | 0.62 | 0.63 (SI) |
| OI <--> CI | 0.62 | 0.38 | 0.66 (CI) |
| PI <--> OI | 0.51 | 0.26 | 0.55 (PI) |
| PI <--> SyI | 0.37 | 0.14 | 0.54 (SyI) |
| SP <--> SI | 0.74 | 0.55 | 0.55 (PI) |
| PI <--> CI | 0.45 | 0.20 | 0.55 (PI) |
| SI <--> CI | 0.65 | 0.42 | 0.63 (SI) |
| SyI <--> SI | 0.62 | 0.38 | 0.54 (SyI) |
| SyI <--> CI | 0.48 | 0.23 | 0.54 (SyI) |

** Out of each dimension in a pair, the one having lowest AVE is compared with the squared correlation values. AVE > SC indicates good discriminant validity

**Table 36(b) Table for Discriminant Validity (for Comment p212)**

| | CR | AVE | MSV | ASV | SI | PI | OI | SyI | CI |
|---|---|---|---|---|---|---|---|---|---|
| **SI** | 0.84 | 0.63 | 0.62 | 0.49 | 0.79 | | | | |
| **PI** | 0.86 | 0.55 | 0.55 | 0.28 | 0.74 | 0.74 | | | |
| **OI** | 0.87 | 0.70 | 0.62 | 0.42 | 0.78 | 0.51 | 0.84 | | |
| **SyI** | 0.82 | 0.54 | 0.38 | 0.28 | 0.62 | 0.37 | 0.62 | 0.73 | |
| **CI** | 0.79 | 0.66 | 0.42 | 0.31 | 0.65 | 0.45 | 0.62 | 0.48 | 0.81 |

### 5.5.3.2 Nomological Validity

Nomological validity of the model was established by two methods as suggested by Hair et al. (2006). First, correlations among the factors were examined to see if they relate positively to one another. The results (see Table 37) supported the prediction that the factors are positively related to one another. The correlation estimates between each pair of factors were positive and significant ($p<0.001$). Thus, the first method supported nomological validity of the model. Second, to establish the model's nomological validity, the relation between factors forming the measurement model and other theoretically related construct was demonstrated. As mentioned in the methodology chapter, the questionnaire also included two customer outcome scales measuring customer loyalty and trust. These scales were adopted from Brakus et al. (2009) and Choudhuri & Holbrook (2001) respectively. These two measures are expected to be positively associated with brand identity (He et al., 2012).

To demonstrate the model's nomological validity, the correlation between the factors and customer trust and loyalty were tested (Churchill, 1995). The two related variables were operationalized with five (loyalty) and four (trust) items. Items for these outcome measures were based on prior items in the literature, as discussed in the methodology chapter. The reliability of these scales was assessed with a composite reliability coefficient and confirmatory factor analysis (Hair el al., 2006), which clearly confirmed the appropriateness of the operationalization (see Table 37).

**Table 37: Correlations between dimensions (Validation Sample)**

| Dimension | PI | OI | SyI | SI | CI |
|---|---|---|---|---|---|
| **PI** | 1.00 | | | | |
| **OI** | .48** | 1.00 | | | |
| **SyI** | .31** | .53** | 1.00 | | |
| **SI** | .67** | .67** | .52** | 1.00 | |
| **CI** | .38** | .56** | .43** | .54*** | 1.00 |

**Table 38: Correlation between Trust Loyalty and SBI dimensions (n=245)**

| | Trust | Loyalty | PI | OI | SyI | SI | CI | SBI |
|---|---|---|---|---|---|---|---|---|
| **Trust** | 1.00 | | | | | | | |
| **Loyalty** | .72** | 1.00 | | | | | | |
| **PI** | .42** | .34** | 1.00 | | | | | |
| **OI** | .52** | .50** | .48** | 1.00 | | | | |
| **SyI** | .41** | .35** | .31** | .53** | 1.00 | | | |
| **SI** | .49** | .48** | .67** | .67** | .52** | 1.00 | | |
| **CI** | .46** | .44** | .38** | .56** | .43** | .54** | 1.00 | |
| **SBI** | .57** | .51** | .69** | .84** | .73** | .86** | .71** | 1.00 |

The results (Table 37 and 38) show that all the correlations between trust, loyalty and dimensions (factors) of service brand identity scale are positive and significant ($p<0.001$). Thus, these are consistent with the theoretical expectations as described.

Thus, the analysis of the correlations among the scale dimensions and the analysis of correlation between these dimensions and other variables (i.e. trust and loyalty) both support the nomological validity of the model.

**Table 39: Fit indices of Trust and loyalty Scales**

| | **Trust Scale (4 Items)** | **Loyalty Scale (5 Items)** |
|---|---|---|
| **Fit Index** | **AVE = .589 ; CR = .748** | **AVE = .596 ; CR = .786** |
| CMIN/df | 2.62 | 2.85 |
| CFI | .98 | .99 |
| GFI | .98 | .99 |
| AGFI | .95 | .93 |
| SRMR | .02 | .01 |
| RMSEA | .08 | .08 |
| TLI | .97 | .97 |

## 5.6 Final Service Brand Identity (SBI) Scale

Having established the validity and reliability of the service brand identity scale in the previous sections, Table 40 below presents the final service brand identity scale with its dimensions and items.

**Table 6: The Final Service Brand Identity (SBI) Scale**

| Dimension | No. Of items | Item Description |
|---|---|---|
| Process Identity | 5 | Item 6 The behaviour of staff delivering brand X |
| | | Item12 The expertise of staff working for brand X |
| | | Item 14 The quality of interaction with staff delivering brand X |
| | | Item 21 The quality of the service provided by brand X |
| | | Item 29 The consistency of service of brand X |
| Organization Identity | 3 | Item 31 The company vision associated with brand X |
| | | Item 33 Your relationship with other customers using brand X |
| | | Item 34 The social responsibility projected by brand X |
| Symbolic Identity | 4 | Item 1 The name of brand X |
| | | Item 2 The logo or symbols used to identify brand X |
| | | Item 7 The colour(s) associated with brand X |
| | | Item8 The country of origin of brand X |
| Servicescape Identity | 3 | Item 13 The appearance of the delivery environment used by brand X |
| | | Item 27 The ambience in brand X's delivery environment |
| | | Item 32 The general environment in which brand X is delivered |
| Communication Identity | 2 | Item 20 Promotions carried out by brand X |
| | | Item 22 The value-added benefits offered by brand X |
| **Total number of dimensions** | **5** | |
| **Total number of items** | **17** | |

These findings provide empirical support to the qualitative findings from consumer interviews (discussed in Chapter 4). The interview findings had suggested three additional dimensions of service brand identity which were related to aspects of service process, physical surroundings and service experience related with the service brand. Except, service experience, the other two dimensions were empirically supported. This indicates that if service firms aim to develop a strong brand identity for their brands, they must take into account these two dimensions that are specifically relevant for service brands.

## 5.7 Chapter Conclusion

This chapter began with the exploration and preparation of survey data for the research. In the first section, the profile of survey respondents was analyzed to establish their representativeness to the UK population. This had implications for generalizing the research findings.

Further, this chapter has sought to answer the research questions raised in the methodology chapter in three ways. First, this chapter established the dimensionality of the service brand identity construct through Exploratory Factor Analysis. The analysis revealed that service brand identity comprises of five dimensions: Process Identity, Organization Identity, Symbolic Identity, Servicescape Identity and Communication Identity. Second, in order to confirm this dimensionality and their relationship with the service brand identity construct, a confirmatory factor analysis was conducted which provided robust results. Third, the validity of the service brand identity scale (comprising of five dimensions and 17 items) was established through testing its construct validity, discriminant validity and nomological validity.

The next chapter of this thesis discusses these research findings in the context of research questions raised in the methodology chapter and the theoretical and practical implications of these research findings.

# CHAPTER 6 DISCUSSION AND CONCLUSION

## 6.1. Introduction

Brand identity has gained tremendous interest from marketing scholars and practitioners alike. Despite this, there is very limited scholarly research that has explicitly examined the concept of brand identity in a services context. More importantly, prior research has provided an array of conceptual models and framework to explain brand identity conceptualisation and components, however the majority of these models have not been subjected to empirical testing, making it difficult to state definitive claims about the key dimensions of brand identity. Consequently, the focus of this thesis has been to conduct a theoretical and empirical examination of this concept and inform extant literature by (1) developing a multi-item scale to measure service brand identity, (2) assessing its validity and reliability, and (3) investigating its relationship with other theoretically-related constructs (brand trust and loyalty).

The scale developed in this thesis demonstrates that service brand identity is comprised of five dimensions, namely, Process Identity, Organization Identity, Symbolic Identity, Servicescape Identity and Communication Identity. Additionally, the scale also establishes that there is a positive association between service brand identity and brand trust and loyalty. All five dimensions of SBI also have positive association with brand trust and loyalty.

In doing so, this thesis has followed rigorous methodological procedures to develop a valid and reliable scale that facilitates measurement of service brand identity. To achieve this, Churchill's (1979) paradigm was followed in conjunction with the recommendations of DeVellis (2003) and other scale development studies (Brakus et al., 2009; Lundstorm & Lamont, 1976). Both, qualitative and quantitative research methods were employed to achieve this aim. Qualitative research was used in the early stages, alongside an extensive literature review, to clarify the domain of the construct and to generate initial scale items. Quantitative methods were subsequently used to purify the items and to develop and validate the final scale.

The purpose of this final chapter is to provide a summary and discussion of the key findings and contributions of this thesis. The chapter covers five key areas. First, it provides a reminder of the key objectives and motivations to undertake this study. Second, it provides a brief discussion of the research process undertaken to achieve these objectives. Third, it reports the key findings that have led to the research contributions in the branding and services marketing fields. Fourth, it outlines and discusses the theoretical, methodological and practical contributions of this study to the research area, demonstrating the rigour of the study. Lastly, it discusses the limitations related to this study and how these can be addressed by carrying our further research.

## 6.2 Motivations

The literature review chapter provided insights on the state of extant research and potential research gaps which need to be addressed to offer a holistic understanding of service brand identity. Further, prior literature on brand identity was reviewed which enabled this study to gain insights into what the current understanding of brand identity is, how it has been defined, what its components are and what aspects need more research. Guided by this critical review, the following research gaps were identified that motivated undertaking this thesis:

- **Service Branding Literature**: Services are said to be the major contributors to the GDP of the majority of the world's developed economies (Ostrom et al., 2010) and hence research in this area is increasingly critical (Kunz & Hogreve, 2011). Berry (2000, p.128) considers services branding as a 'cornerstone of services marketing for today and tomorrow'. Service branding needs significant research attention in order to inform the literature (McDonald et al., 2001). In order to develop distinctively relevant service brands and to communicate an inexperienced experience related to services, it is important to create a strong brand identity (Dibb & Simkin, 1993). Scholars have researched areas like brand equity, internal branding, brand loyalty etc. in services, however, there has been very little focus on looking at brand identity in a service context.
- **Brand Identity literature**: Within the brand identity literature there were various shortcomings that needed to be addressed. For example,
    - Brand identity measurement has not received much attention thus far. To date, brand identity literature has strongly focused on establishing conceptual models or theoretical frameworks (see for e.g. Upshaw, 1995; Aaker, 1996; Kapferer, 2000, De Chernatony, 1999; Burmann et

al., 2009; de Silveira et al., 2013) explaining what brand identity is and what it is comprised of. Essentially these can primarily be considered as theoretical propositions or purely descriptive. This is because the majority of these models have not been subjected to empirical testing (Coleman et al., 2011), thereby, making it difficult to gauge the robustness and validity of them. Many models have not been derived through empirical methods like interviews, surveys etc., rather they are based on researchers' conceptualisations. Perhaps, this explains the reason behind each model suggesting a different set of dimensions of brand identity. Such limitations reduce the ability to make definitive claims about key dimensions of brand identity. In addition to these limitations, there is no clear indication of the applicability and suitability of these models in a service context.

Considering these arguments, there was a need to focus more on an empirical approach to lend support to the theoretical propositions on the dimensions of brand identity. One of the ways to address these shortcomings was to develop a scale to measure brand identity. This would not only help in measuring brand identity but will also empirically determine the key dimensions. Moreover, a scale could be influential in opening and facilitating new avenues of research in the field by allowing researchers to use it to establish any causal relationships between brand identity and other constructs, thereby highlighting the antecedents and consequences of brand identity. Additionally, the scale can guide managers in conducting industry wide benchmark studies. Therefore, such empirical research can open numerous research opportunities for future researchers and help in the research development of the area.

- Another motivation was to take into account the consumer perspective in developing brand identity. This study recognizes that brand identity can be conceived by managers and end-use customers in different ways. Previous studies have largely focused on managerial views and have considered brand identity to be formed unilaterally (see for e.g. Aaker, 1996; De Chernatony, 1999; Coleman et al., 2011; Viot, 2011 etc.), largely overlooking the role of one of the most important stakeholder groups: consumers. Research is increasingly establishing that in this era of marketing, managers are no longer considered as the sole creators of brand identity (Payne et al., 2009; Merz et al., 2009; da Silveira et al., 2013). Therefore, there was a curiosity to inform the literature of the consumer perspective – their understanding of brand identity. This was important because marketing managers might also lend more weight to consumers' understanding of brand identity and keep those elements in mind while creating and developing brand identity for their brands.

In summary, the dearth of research studies examining consumers' understanding of brand identity, along with the lack of a valid and comprehensive scale to measure service brand identity, motivated this study.

Figure 12 provides a research map that highlights how this research acts as a bridge to bind services branding and brand identity literature. It highlights what is already known (existing research) in brand identity and services branding literature and what is not known (shortcomings). The middle panel shows how this study addresses these shortcomings and makes novel contributions to these literature streams. Therefore, to locate where this study fits into this research map, it is noted that this research bridges the gap between services branding and brand identity literature – in services branding literature, there is a lack of brand identity studies and within brand identity literature, there is a lack of studies focusing on the service context. Thus, this research sits in the overlap between these two literature streams as shown in Figure 13.

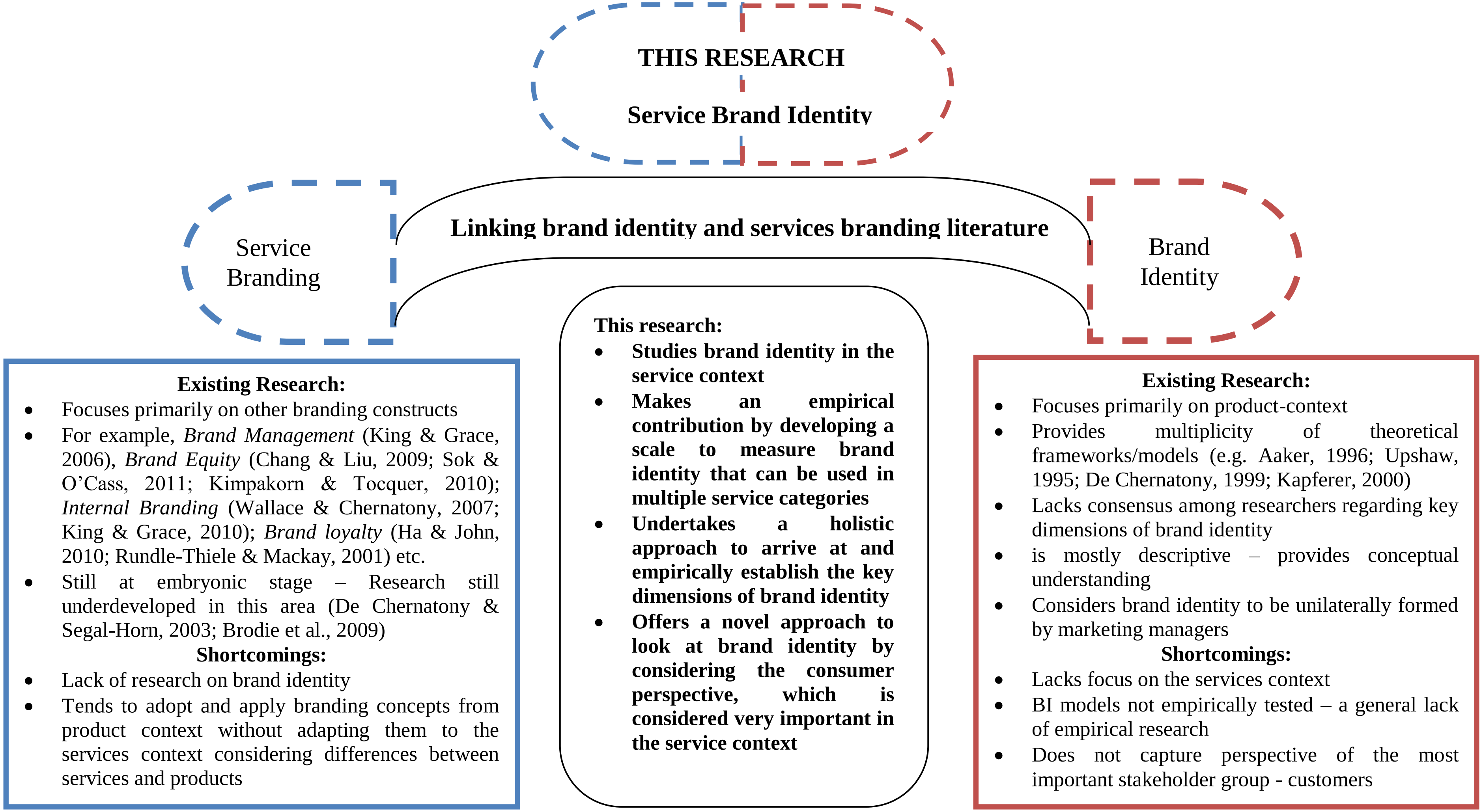


**Figure 12: Research Map Showing Where This Study Fits in the Literature**

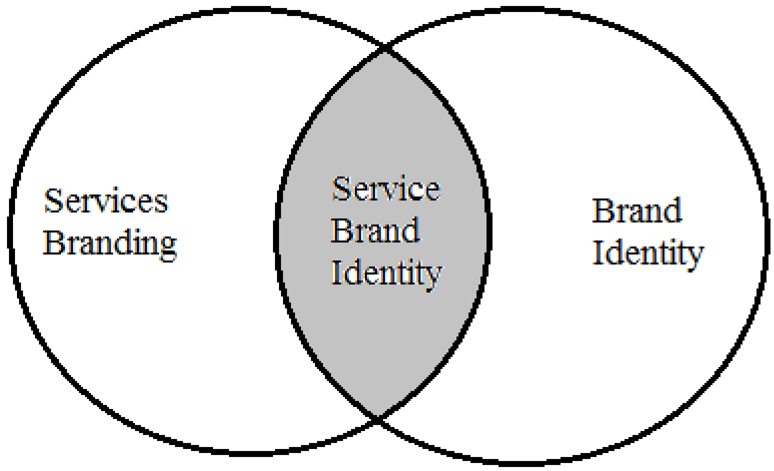


**Figure 13**

## 6.3 Research objectives

Inspired by the above motivations, this thesis adopted a sound, detailed and theoretically informed approach aimed to address the shortcomings (shown in Figure 12). In this regard, the thesis aimed to achieve the following research objectives:

**Main Objective: To develop a valid and reliable scale to measure service brand identity**

The overarching aim of this research was to develop a scale to measure service brand identity. For this, extant scale development procedures were followed. Scale development is a lengthy process that starts with identifying/confirming the domain of the construct (brand identity in this case) i.e. to say what brand identity is and what is it not and what it is comprised of (dimensions). This is followed by generating items through which the construct will be measured and then to conduct various statistical tests to validate the final scale. In order to achieve this overarching objective, there were the following sub-objectives.

**Sub-Objective 1**: To critique the current literature on brand identity to define the domain of the construct

**Sub-Objective 2**: To conceptualize service brand identity by incorporating a consumer perspective in the development of service brand identity

**Sub-Objective 3**: To determine key dimensions that constitutes service brand identity

**Sub-Objective 4:** To apply the scale to explore the relationship between brand identity and brand trust and loyalty

## 6.4 Research Methodology

To fulfill the objectives highlighted above, this research uses rigorous methodological procedures to construct a robust and reliable service brand identity scale. Both qualitative as well as quantitative approaches were adopted across stages of the scale development process to arrive at the final scale. For example, the qualitative approach was adopted to explore consumers' understandings of brand identity and to conduct an expert panel review to revise the scale items, whereas a quantitative approach was adopted for developing the final scale using a wider sample of UK based consumers. Thus, this study was classified as mixed-methods research in line with suggestions in the literature that studies that aim to develop an instrument to measure certain phenomenon are usually classified as mixed-method studies. This is because such research involves collecting and analyzing both qualitative and quantitative data, mixing the data and reporting the study as a single mixed methods' study (Creswell & Plano-Clark, 2007).

In terms of research design, between a parallel mixed design and a sequential mixed design, the latter was chosen due to the unequal weighting given to the use of qualitative and quantitative approaches in this research. In this research, the qualitative phase helped in developing and setting the boundaries for the scale, which was then empirically validated through a quantitative phase. Thus, quantitative research was built upon preliminary findings from qualitative research (as discussed in chapter 4).

Overall, this study followed a comprehensive scale development process that included both qualitative studies (interviews, expert panel reviews) and quantitative studies (surveys, factor analysis). This resulted in a robust and reliable scale that met all the requirements of content, convergent, discriminant and nomological validity.

## 6.5 Key Findings: Service Brand Identity (SBI) Scale

This section discusses the key finding of this research study. First it discusses and highlights the definition of service brand identity that this research proposes based on the findings. Then, it provides an in-depth discussion on scale conceptualisation, i.e. the key dimensions of service brand identity and their implications. Third, it discusses the final scale items and how these were refined through various stages using EFA and CFA. Lastly, it discusses the relationship between service brand identity and brand trust and loyalty.

### 6.5.1 Service Brand Identity Definition

As discussed in the literature review chapter (Chapter 2), researchers have portrayed brand identity as the brand's specific and unique attributes (Kapferer, 2000, p.107), the brand's uniqueness and essential idea (Aaker, 1996) and the brand's innermost substance (Csaba & Bengtsson, 2006). Brand identity tends to satisfy consumers' symbolic needs and, thus, helps consumers in fulfilling their self-definitional needs for uniqueness (He et al., 2012). In line with this, Upshaw (1995, p.12) defines brand identity as the "configuration of words, images, ideas, and associations that form a consumer's aggregate perceptions of a brand." The author argues that the only true brand identity is what settles into the consumer's brain; "the rest are only intentions and wasted messages" (p.13). By contrast, Aaker (1996, p.168) considers brand identity to emanate unilaterally from within a firm and hence describes it as "a unique set of brand associations that the brand strategist aspires to create or maintain." The majority of research to date has closely followed or has built upon Aaker's (1996) conceptualization of brand identity (see for e.g. De Chernatony, 1999; Gylline & Lindberg-Repo, 2006; Alsem & Kostelijk, 2008).

As per the discussion in Section 2.3.2.1, the existing brand identity definitions were carefully examined to identify the broad meaning depicted by them. Based on this synthesis, this research proposed the following definition of service brand identity:

> *"The sum of various factors that define the brand, that give it distinguishable features and make it recognizable."*

Through this definition, this research focused on the core/basic meaning of brand identity irrespective of any particular perspective (managerial or consumer).

### 6.5.2 Scale Conceptualisation

This research has adopted a vigorous process to develop a brand identity scale. The scale development process included both qualitative and quantitative methods as discussed in section 6.4 (and chapter 3). The results presented here are robust and reliable since they met all the requirements of content, convergent, discriminant and nomological validity. The scale suggests that service brand identity comprises of five dimensions, namely: Process Identity, Organization Identity, Symbolic Identity, Servicescape Identity and Communication Identity. These dimensions are explained in Table 41.

**Table 7 Key Dimensions of Service Brand Identity**

| Dimension | Description |
|---|---|
| **Set A – Dimensions derived from the literature, then confirmed through consumer interviews** | |
| Symbolic Identity | It encapsulates elements that deal with the outer appearance or representation of a brand, its name, logo, symbol, colour and country of origin |
| Organization Identity | It includes organization related aspects that can contribute to building brand identity, like company vision, social responsibility initiatives and relationships between its customers |
| Communication Identity | It includes communication-related aspects that can help in strengthening the brand identity through promotions and value-added benefits |
| **Set B – New dimensions derived from consumer interviews** | |
| Servicescape Identity | It includes elements that are related to the appearance and ambience of the delivery environment and general service environment what can help in developing brand identity |
| Process Identity | It includes elements related with the service process, like the overall quality and consistency of service provided, and service staff related aspects ( e.g. behaviour, appearance, quality of interaction with customers) that contribute in the development of brand identity |

Each of these dimensions is further discussed below:

1. **Process Identity** – This dimension is made up of aspects related with the service staff and the service itself. For example, the service staff's expertise in providing the service, quality of interaction with the customers and their overall behaviour are characteristics that contribute to developing brand identity. In addition to this, the consistency with which the service is delivered and the quality of the service are also important aspects.

   It is now widely acknowledged in the literature that services branding is highly dependent on service staff's actions and attitudes (Punjaisri et al., 2009, p.209). Thus, in order to develop a strong service brand identity, service firms need to pay particular attention to their service staff attending to the consumer. The findings of this thesis suggest that the service staff's behaviour is considered to be an important contributor to brand identity development for service brands. This is consistent with previous research which suggests that "strong and successful service brands are realised through positive employee behaviour" (King & Grace, 2010, p. 939). Besides, customers are sensitive to the service staff's behaviour and attitudes towards them during service encounters (Schlager et al., 2011) which makes the service employees' role even more important in making sure that customers get positive feelings and experiences during such interactions.

In addition to this, since employees represent the service firm to their customers (Wallace & De Chernatory, 2007), the quality of interaction between them and customers affects how customers interpret the brand. The quality of interaction with service staff is thus one of the most important elements that contribute to service brand identity.

This study's findings also suggest that the consistency with which the service is provided and the overall quality of service also contributes to brand identity development. Consistency is an important aspect since consistency in performance and in providing service leads to consistency in brand communication that takes place at each service encounter (Wallace & De Chernatony, 2007).

Based on these findings, this research suggests that it is vital for service firms to provide an opportunity to their staff to understand and deliver the brand promise to customers (King & Grace, 2010). Firms can, thus, educate their employees about the brand to make them understand the brand ethos, vision and meaning, so that they can communicate them to the customers. Service employees hold the capacity to influence the customer's opinion about the brand (Punjaisri et al., 2009), hence service firms must make sure that ample training and information/brand knowledge is provided to employees to consistently and effectively deliver the service brand. In order for the brand to be true to its identity, it is crucial for service staff to understand brand values and company culture and practice these during service encounters (Wallace & De Chernatony, 2009). Thus, this study suggests that all these efforts will in turn result in the long-term benefit of strong brand identity creation for service brands.

2. **Servicescape Identity** – There were three items under this dimension after pilot testing. Interestingly, all three items were retained after the final scale was established. Thus, this dimension also received empirical support as one of the dimensions of brand identity. This indicates that for developing service brand identity, servicescape elements like the appearance of the delivery environment, and ambience are important. In addition to this, the findings lend support to qualitative findings from consumer interviews that proposed that servicescape elements can contribute to developing service brand identity.

   The servicescape is the physical environment where the service is rendered as well as consumed (Nguyen, 2006). The servicescape plays an important role in affecting brand identity for service brands. It acts as the interface between customers and the service employees where interaction takes place. It communicates cues related to the capabilities and quality of service firm that are inherent in the physical environment (Bitner, 1992). The servicescape has the potential to communicate the identity and purpose of the service firm to its consumers which creates a deep impact on how consumers perceive a service (Bitner, 1992).

Apart from the service process, service firms must also take care of the appearance of their delivery environment and the overall ambience that will embrace the customers when they are physically present in a service environment. The findings suggest that these servicescape elements contribute in developing strong brand identity. This is consistent with the prior literature on services marketing which suggests that physical environment is very important for service firms and can have a deep impact on customers in terms of their overall experience with the firm, their satisfaction, and loyalty towards the service brand (Bitner, 1992; Mayer et al., 2003; Harris & Ezeh, 2008). Since, brand identity is how a service may be perceived by the customers (Coleman et al., 2011), the servicescape has the potential to affect brand identity for service brands. This is also supported by Keller's (1993) statement that the place where a service is delivered (or servicescape) plays a key role in building brand associations in the customer's mindset.

In addition to this, Underwood et al. (2001) state that servicescape or the physical facility can play a key role in creating service identity and enhancing the degree with which customers can identify with the service provider. According to the authors, two aspects of facilities management are directly relevant to the enhancement of identification with a service provider: a) the importance attached to the facility in communicating brand identity of the firm and b) the degree to which cues and the physical environment help in forming group identity. Thus, the servicescape helps in providing a tangible and visual meaning to the service brand which helps in contributing to its awareness and identity (Underwood et al., 2001). Thus, the servicescape makes an important aspect in developing a strong service brand identity.

3. **Symbolic Identity** – The third factor incorporates items that are related to the symbolic aspects of the brand such as name, logo, colour, etc. This has consistently featured as the key element of brand identity in previous studies also (Aaker, 1996; Kapferer, 2000; Upshaw, 1995). This dimension comprises of four items. The first three items were related to the brand name, logo/symbol used by the brand and colour associated with the brand. The fourth item is related to the country of origin of the brand. The research findings of this thesis suggest that perhaps, the country of origin of the service brand is also seen as a symbolic aspect by consumers.

   The findings also lend support to suggestions in the literature that these aspects contribute in brand identity development (e.g. Aaker, 1996; De Chernatony, 1999; Kapferer, 2000; Upshaw, 1995 etc.). More importantly, this study also lends empirical support to the dimensions generated from the literature which were not yet tested. For example, the findings suggest that symbolic elements like brand name, logo, colour and brand's country of origin – all contribute towards brand identity development for service brands.

Thus, the findings suggest that in order to develop a strong service brand identity, not only traditional marketing elements like brand name, logo, colour, communication etc. should be taken care of, but also service process and servicescape elements like staff behaviour, service environment and ambience.

4. **Organization Identity** – The final dimension comprises items related to the company vision, social responsibility initiatives and relationship between its consumers. This is consistent with previous literature (Aaker, 1996; De Chernatony, 1999) that postulates that a clear vision provides a sense of direction for brand identity to proceed. The identity of a brand must be consistent with the company vision in order to maintain long-term relevance. Inconsistencies between the communicated identity and company vision can create confusion in the minds of consumers thereby affecting the strength of brand identity.

   It can be concluded that social responsibility initiatives play an important role in consumers' evaluation of brand identity. It has been widely established in the literature that consumers view firms favourably when they undertake social responsibility initiatives. For example, it has been established that a company's social responsibility initiatives and consumers' attitudes toward that company and its products are positively related (Sen & Bhattacharya, 2001). This suggests one of the ways in which service firms can strategically enrich their brand identity is by focusing on their social responsibility efforts.

5. **Communication Identity** – The fifth factor contains items relating to the communication aspects. Under this dimension, items relate to the promotion activities carried out by a service firm and the value-added offers communicated to the consumers. The findings indicate that communication plays an important role in developing brand identity. This is consistent with the relevant literature. For example, Keller (2001:823) suggests that marketing communications exist as a way for firms to engage in dialogue with consumers and communicate their product offerings. Furthermore, Duncan & Moriarty (1998) posit that communication channels help in generating a favourable response from consumers. This study's results suggests that for developing brand identity, information regarding the promotion activities of the firm and the value-added benefits offered to consumers are the most important.

To summarise, the above discussion suggests that the most important aspects to consider when developing service brand identity are the service process and servicescape. Along with this, the symbolic, organizational, and communication aspects are also equally important in establishing and strengthening brand identity.

### 6.5.3 Final Scale Items

The final scale items were obtained after several purification stages which involved various statistical analyses. The final outcome was a five factor, 17-item scale, suggesting that service brand identity is actually comprised of five dimensions as shown in Table 42 below:

**Table 42 Service Brand Identity and its dimensions**

| Dimension | Item Description |
|---|---|
| Process Identity | The behaviour of staff delivering brand X |
| | The expertise of staff working for brand X |
| | The quality of interaction with staff delivering brand X |
| | The quality of the service provided by brand X |
| | The consistency of service of brand X |
| Organization Identity | The company vision associated with brand X |
| | Your relationship with other customers using brand X |
| | The social responsibility projected by brand X |
| Symbolic Identity | The name of brand X |
| | The logo or symbols used to identify brand X |
| | The colour(s) associated with brand X |
| | The country of origin of brand X |
| Servicescape Identity | The appearance of the delivery environment used by brand X |
| | The ambience in brand X's delivery environment |
| | The general environment in which brand X is delivered |
| Communication Identity | Promotions carried out by brand X |
| | The value-added benefits offered by brand X |

## 6.6 Research Contributions

### 6.6.1 Theoretical and Empirical contributions

This thesis makes theoretical, empirical and practical contributions that benefit brand identity research in several ways. First, it contributes to the service and branding domain by developing a scale for measuring service brand identity which is established as a multidimensional construct having five dimensions (shown in Table 42). The key contribution of this study is the development of a psychometrically valid and reliable scale. Various scholars have suggested that measurement of a marketing construct needs to be valid and reliable in order to contribute to the development of a field and the ability to accurately measure a construct is often argued to be the cornerstone for enriching existing knowledge (Slavec & Drnovsek, 2012; Reynolds, 2010).

Second, it extends the literature on brand identity (Upshaw, 1995; Aaker, 1996; De Chernatony, 1999; Kapferer, 2000; Burmann et al., 2009; Coleman et al., 2011) to include the service domain which has to date not received much research attention. Extant research has focused on studying brand identity over a generic/goods context, largely ignoring its applicability to the service context. This thesis has addressed this shortcoming by establishing that brand identity is equally important for service brands. The findings forge a deeper understanding of the key dimensions of brand identity and suggest two new dimensions that are particularly relevant for services that were not previously highlighted in the brand identity literature. The proposed dimensions contribute to a greater and more complete understanding of the dimensionality and outcomes of brand identity from a service-centred view.

Third, this thesis has provided a much-needed consumer perspective on brand identity and its components. The majority of previous research has suggested that brand identity is a unilateral construct portraying marketing strategists' or managers' views of how they want the brand to be perceived. This view has been increasingly criticized and challenged in the branding literature (e.g. Payne et al., 2009) following the emerging S-D logic (Vargo & Lusch, 2004). Thus, this research has responded to calls for more research on marketing constructs to account for the consumers' perspective as well (Rust, 1988; Payne et al., 2009; Arnould et al., 2006). In this regard, this research is among the first to empirically link customer-based variables to a specific brand identity scale.

Relatedly, this thesis contributes to an emerging literature adopting a service-dominant (S-D) logic approach in branding (Bello et al., 2007, Payne et al., 2009). This stream has highlighted that since marketing has shifted to a new S-D logic paradigm, branding constructs must be looked at from the consumer perspective as well rather than just the company perspective. Following this proposition and the fact that consumers play a very important role in service production and consumption process (Gronroos, 1982), this thesis shows that customers also play a key role in developing a strong brand identity. It offers insight into the components that are deemed important by consumers in developing service brand identity.

Fourth, the scale will enable future researchers to examine how service brand identity results from its (potential) antecedents such as marketing mix strategy (Nandan, 2005), environment conditions and partners' actions (media, distribution etc.) (da Silveira et al., 2013). These antecedents, which have not been empirically established yet, may be studied more efficiently using the scale. Similarly, the scale can be used to investigate the consequences of brand identity and test the impact of brand identity on other branding and consumer constructs (for e.g. on pricing (Csaba & Bengtsson 2006; Brand Equity (Madavaram et al., 2005).

Lastly, an important theoretical contribution of this research lies in the nomological testing of the service brand identity measures against trust and loyalty. The results indicate that service brand identity and all its five dimensions are positively associated with brand trust and loyalty. The implication of these findings is discussed further in the scale applications section.

### 6.6.2 Managerial contribution

The service brand identity scale developed in this study is not only valid and reliable but also parsimonious. From a managerial perspective, this proves helpful in tracking brand identity of individual service brands regularly and also in comparing with competitor brands. Such tracking of the progress of a brand's identity over time can reveal long-term efficiency of managerial efforts. Using the scale composite score and the relative importance of different dimensions on the array of services offered, managers can understand the contribution of individual dimensions to overall brand identity. This can help managers in gaining an improved understanding of how different dimensions fit together and contribute to brand identity. This can serve as an important channel to devote company resources efficiently to strengthen the brand identity.

### 6.6.3 Practical Contribution - Scale Applications

This thesis also makes contribution in terms of the applicability of the scale for future research studies. This research has demonstrated that the scale can be used to examine the relationship between service brand identity and other branding and consumer constructs that have been theoretically established but not empirically tested. For example, this study used the SBI scale to establish the relationship between service brand identity and brand trust and loyalty. The scale showed that there is a positive association between brand identity and brand trust meaning that the stronger the identity of a brand, the greater the trust the consumer places on it. Similarly, the scale established a positive link between brand identity and loyalty, showing that a stronger brand identity garners greater loyalty towards the brand. This finding opens a new area for researchers to further explore the causal relationship between service brand identity and trust and loyalty, i.e. to what extent a stronger brand identity may lead to loyalty towards the brand?

### 6.6.4 Other Potential Applications

The SBI scale developed in this study displays good validity and reliability. It is a concise scale with only 17 items that can be used by researchers as well as service organisations in multiple ways. For example, the scale can be used across a broad spectrum of services (as demonstrated in this research also) and to gain improved understanding the strength of a brand's identity in comparison with other competitor brands.

The scale can also be used in industry-wide benchmark studies where the brand identity of several brands in that industry is measured and compared to see which brand is the strongest in terms of having a strong identity. Further research can be carried out on these brands to understand how they strengthen their brand identity, what practices do they follow and how might other brands strengthen their identity.

Most importantly, the scale can be used by marketing researchers in conducting much needed empirical studies to contribute to the conceptually-oriented brand identity literature. As suggested in Chapter 2 of this thesis, brand identity literature greatly lacks empirical studies, particularly studies that highlight the antecedents and consequences of brand identity and studies that establish causal links between brand identity and other branding and consumer constructs, for example brand equity, customer satisfaction, pricing etc. In the past, researchers have called for such research, for instance Schmitt & Simonson (1997) posit that brand identity may play an important role in demanding a premium price. However, there is a lack of research to lend empirical evidence to this theoretical proposition. In order to assess if there exists a causal relationship and how strong such a relationship is between premium pricing and brand identity, researchers can use the SBI scale developed in this study. Further, in the context of competition or market power of existing brands affected by new entrants, Schmitt & Simonson (1997) state that it becomes essential to understand how the brand identity of existing brands compares with new brands. This again will require measuring brand identity through the scale developed here since it can help in assessing and highlighting the differences in brand identity of competitor brands.

## 6.7 Limitations and Future Research

As no research can be free from limitations, so is the case with this research. This section presents some limitations that arise from this study and provide scope for future research.

- UK-based study – This research is based on data collected from participants drawn only from the UK population. This means that this is a UK based study. It has not been tested or established whether this study's findings will generalize to other countries as well. For example, it is not known whether the results will still hold if participants are drawn from a developing country like India, China etc. Similarly, results can vary for a US-based sample as well. There might be differences in results due to cultural, social and economic differences between different countries.

  Future research should be carried out to replicate this study across cultures and other service categories to confirm the scale's external validity and reliability. Such replication will provide a solid understanding of differences or similarities between consumers' perspectives on brand identity in different cultures. This in turn will help firms to effectively develop and manage their brand identity.

- Online vs offline environments – This research focused only on offline service environments that have a physical presence and that allow more face-to-face interaction between consumers and service providers. However, this study did not test the scale in online service environments where physical interaction between the customer and service provider is minimal or absent.

Future research studies can investigate whether the scale developed in this study could be adapted for those service firms that deliver their services through the internet (i.e. purely online) or through self-service technologies where there is minimal face-to-face interaction.

Further, future research studies can modify this scale to suit online environments. For example, in the past scales (e.g. SERVQUAL) have been developed for measuring service quality (Parasuraman et al., 1988) developed in an offline context, but have been successfully adapted for measuring online quality, i.e. WEBQUAL (Loiacono et al., 2007). Therefore, similar action can be taken with regards to this research and a scale for online services can be developed using procedures followed by this research for scale development.

- Survey design – There are limitations related to the survey design of this study. These limitations must be considered before conducting future research. This study collected data using an online survey which suffers from some inherent disadvantages. For example, it may have precluded those who did not have access to the internet. However, online surveys were deemed most suitable for the purpose of this study as discussed in Chapter 3 of this thesis. Future research can nonetheless consider using surveys in an offline environment to offset any disadvantages.

- Consumer vs managerial perspective – This study has considered only the consumer perspective for developing the scale. Although this was warranted for this research considering the service context, the managerial perspective could also have been considered. However, due to funding and time constraints, this was out of scope of this thesis.

  Future research can, however, conduct a 'matched study' where the scale developed here is used to collect data from both consumers as well as managers in a particular service category. This will enable researchers to compare the manager and consumer perspectives of brand identity to establish whether there is a match or mismatch between their perspectives. This will lend further support to the scale.

The topic of brand identity is important as discussed in this thesis, which calls for more research to further develop this research field. The author hopes that this thesis has provided an important and useful research study on brand identity and a platform for further future activity.

## 6.8 Chapter Summary

Brand identity is key to creating, distinguishing, and managing brands. It provides meaning to the brand and is a key aspect in sowing the seeds for long-term relationships and trust of consumers in the brand. This research conceptualises service brand identity as the sum of various factors that define the brand, that give it distinguishable features and make it recognizable while taking into consideration the perspective of customers.

The conceptualisation of service brand identity involves inputs from extensive literature review and in-depth consumer interviews. The findings from interviews are especially interesting because previous studies often failed to take into account the service-related dimensions/aspects that can affect the strength of brand identity. Through consumer interviews and subsequent empirical analysis, support is gained for two new dimensions related specifically to service elements of service process and servicescape.

This research has constructed a SBI scale that comprises five-factors and 17-items. It suggests five key dimensions of services brand identity, namely: P*rocess Identity*, *Servicescape Identity*, *Organization Identity*, *Symbolic* and *Communication Identity*. Psychometrically, the scale is internally consistent and consistent across samples. The scale also successfully passed various reliability and validity tests. Importantly, the scale displays discriminant and nomological validity.

The research findings forge a deeper understanding of the key dimensions of services brand identity and suggest two new dimensions that are particularly relevant for services but were not yet highlighted in the literature. This suggests that if service providers work on these dimensions, they will be able to develop a much stronger brand identity than their competitors.

Through this research, it is also established that the consumer perspective is important in developing brand identity and that various service elements like service employees, servicescape, and service process can have an influential role in developing and further strengthening the service brand identity.

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# APPENDIX A

## <u>Research Interview Guide</u>

<u>Instructions</u>

All the questions are open ended, which means you can provide as much detailed information as you want and fully express your viewpoints and experiences.

The interviewer may ask questions to further clarify some responses.

If you do not want to answer any question you may let the interviewer know and ask to move on to the next question.

The interview will be tape-recorded and the interviewer will take notes during the interview. Are you happy with this arrangement?

I am interested in understanding consumer perspective of brands and brand identity. I would like you to think about your favourite brands for a few minutes. Tell me if you are ready to answer further questions.

**<u>Questions</u>**

1) What are some of your favourite brands?
2) What makes these brands your favourite?
3) What comes to your mind when you think of this brand?
4) What does the brand mean for you?
5) How did you form an image of the brand?
6) What makes this brand different from competitor brands?
7) If this brand was a person, what kind of character would it be? How would you describe it?
8) Can you think of a brand you are not fond of or the one you are not keen on?
9) What comes to your mind when you think of this brand?
10) If this brand was a person, what would it be like?
11) What characteristics/aspects/features would you like to change about this brand?
12) What would you not want to change?

13) According to you, what might identity of a brand mean?
14) For your favourite brand, what is its identity?
15) What would a brand's identity comprise of?
16) What traits/features can contribute to the building of a brand's identity?
17) What aspects make up the identity of a brand?
18) What are the characteristics/dimensions that make up the identity of a brand?
19) Now, keeping in mind all the discussion till now, if we have to talk about services and talk about the applicability of the concept of identity to services, do you think there are any differences among service and goods brands?
20) Do you think the characteristics/dimensions that make up the identity in goods brand would remain same for service brands? Do you think there will be any differences?
21) What might some of these differences be?
22) You talked about a feature 'XYZ' when we were talking about brand identity in general. How important do you think it is in service context?
23) Do you think these concepts can be applied in service context? What characteristics do you think needs to be incorporated?

Feedback questions (for pilot interviews)

1) Did you find it difficult to understand any question?
2) How can I further refine my approach?
3) Would you like to suggest some changes in my approach to improve anything about this interview – questions, probing questions, way of asking question etc.

# APPENDIX B

**Table 83: List of initial 168 items**

| Dimension | Item no. | Item code | Item statement |
|---|---|---|---|
| Brand as symbol | IT1 | BSM1 | An easy to remember name is important for establishing brand identity (T2) |
| | IT2 | BSM2 | The name of a brand is important for establishing brand identity (T2) |
| | IT3 | BSM3 | Brand X's name plays an important role in creating its identity (T2) |
| | IT4 | BSM4 | I prefer brand that has a long history and good record (T2) |
| | IT5 | BSM5 | A brand must have a long history and good record for establishing a brand identity (T2) |
| | IT6 | BSM6 | Brand X has a long history and good record (T2) |
| | IT7 | BSM7 | The use of a particular colour by a brand symbolises its identity (T4) |
| | IT8 | BSM8 | Use of a particular colour plays an important role in symbolising (service) brand identity (T4) |
| | IT9 | BSM9 | The history of the brand is an important source of (Service) brand identity (T4) |
| | IT10 | BSM10 | The history of the brand plays an important role in building brand identity (T4) |
| | IT11 | BSM11 | How the brand looks is an important source of brand identity (T4) |
| | IT12 | BSM12 | The looks of the brand are important in building (service) brand identity (T4) |
| | IT13 | BSM13 | Packaging can play an important role in forming identity of a brand (T6) |
| | IT14 | BSM14 | Packaging can play an important role in building identity of a brand (T6) |
| | IT15 | BSM15 | Logo colour plays an important role in forming identity of a brand (T6) |
| | IT16 | BSM16 | Colours in the (product) design plays an important role in forming identity of a brand (T6) |
| | IT17 | BSM17 | Brand X's symbol contributes to its identity (Aaker 1996) |
| | IT18 | BSM18 | Brand X's heritage represents its identity (Aaker 1996) |

| | | | |
|---|---|---|---|
| | IT19 | BSM19 | The logo of Brand X is an important part of its identity (Aaker 1996) |
| | IT20 | BSM20 | The name of brand X conveys its identity (adapted from Berry 1988) |
| | IT21 | BSM21 | The website is visually appealing (Loiacono et al. 2007) |
| | | | |
| Brand-as-product | IT22 | BPT1 | Product design is very important in developing a brand’s identity (T1) |
| | IT23 | BPT2 | location is very important for me to choose a service brand (T1) |
| | IT24 | BPT3 | Location is an important criteria on which I evaluate a service brand (T1) |
| | IT25 | BPT4 | I evaluate service offering on the basis of idea they deliver/communicate (T1) |
| | IT26 | BPT5 | Nationality is an important feature on which I evaluate a service brand (T1) |
| | IT27 | BPT6 | I chose brand X (partly?) because of its Nationality (T1) |
| | IT28 | BPT7 | Easy-to-use services have better chance to develop strong brand identity (T3) |
| | IT29 | BPT8 | The degree to which services are easy-to-use is an important criteria for evaluating service brand (T3) |
| | IT30 | BPT9 | The degree to which services are easy-to-use is important in establishing brand identity (T3) |
| | IT31 | BPT10 | Value-added services play an important role in establishing brand identity (T3) |
| | IT32 | BPT11 | Value-added services play an important role in developing brand identity (T3) |
| | IT33 | BPT12 | Value-added services are an important criteria in choosing a service brand (T3) |
| | IT34 | BPT13 | A service brand with ‘value-added services’ will have stronger brand identity (T3) |
| | IT35 | BPT14 | A service brand with ‘value-added services’ has stronger brand identity (T3) |
| | IT36 | BPT15 | Complimentary services act as differentiating factor for a service brand (T4) |
| | IT37 | BPT16 | Complimentary services are important factors in developing brand identity (T4) |
| | IT38 | BPT17 | Complimentary services are important factors in establishing brand identity (T4) |
| | IT39 | BPT18 | User-friendly features of a service brand can play an important role in building its identity (T5) |

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| | IT40 | BPT19 | User-friendly features of a service brand are important criteria for choosing a service brand (T5) |
| | IT41 | BPT20 | A novel and unique service offering is important to build service brand identity (T6) |
| | IT42 | BPT21 | Availability is an important criteria for choosing a service brand (T7) |
| | IT43 | BPT22 | Availability is an important criteria for forming brand identity (T8) |
| | IT44 | BPT23 | Brand X is always available when I want to use (avail) it (T8) |
| | IT45 | BPT24 | Accessibility of a service brand is important in building brand identity (T8) |
| | IT46 | BPT25 | Brand X is accessible to me wherever I go (T8) |
| | IT47 | BPT26 | Accessibility of brand X is important for me (T8) |
| | IT48 | BPT27 | I associate Brand X with its country of origin (Aaker 1996) |
| | IT49 | BPT28 | Brand X has a broad range of users (Aaker 1996) |
| | IT50 | BPT29 | Brand X has a limited spectrum of users (Aaker 1996) |
| | IT51 | BPT30 | A creative/innovative website design of this brand (adapted Loiacono et al. 2007) |
| | | | |
| Brand-as-organization | IT52 | BOR1 | A brand can develop its identity through the company CEO and people. (T1) |
| | IT53 | BOR2 | A brand's identity emanates from the kind of brand the company CEO and people want to create (T1) |
| | IT54 | BOR3 | A brand's identity emanates from the kind of idea the company CEO and people want to embed in the brand (T1) |
| | IT55 | BOR4 | Brand X gets part of its identity from the company CEO and people (T1) |
| | IT56 | BOR5 | Company's culture is important in developing a brand identity (T1) |
| | IT57 | BOR6 | Company's culture that is embedded in the brand helps in developing brand identity(T1) |
| | IT58 | BOR7 | Brand X's company culture can be seen embedded in the brand (T1) |
| | IT59 | BOR8 | Company culture that you observe in the service setting of this brand (T9) |
| | IT60 | BOR9 | The philosophy of a service firm is an important distinguishing factor for service brands (T7) |
| | IT61 | BOR10 | Social responsibility initiatives by service firms play an important role in forming a strong brand identity (T7) |
| | IT62 | BOR11 | Participating in social responsibility activities helps in |

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| | | | forming a strong brand identity for service brands (T7) |
| | IT63 | BOR12 | Company culture that you hear about from other sources |
| | IT64 | BOR13 | The company culture at brand X differentiates it from other similar brands |
| | | | |
| Brand-as-Process | IT65 | BPS1 | the person who delivers service plays an important role in developing brand identity (T1) |
| | IT66 | BPS2 | Service employees play an active role in creating and developing (service) brand identity (T1) |
| | IT67 | BPS3 | Brand X's service employees play an active role in creating and developing (service) brand identity (T1) |
| | IT68 | BPS4 | Employee training is important in serving service customers (T2) |
| | IT69 | BPS5 | Staff training is an important criteria in selecting a service brand (T2) |
| | IT70 | BPS6 | Staff training is an important criteria for evaluating service brand (T2) |
| | IT71 | BPS7 | Brand X's service staff are well trained (T2) |
| | IT72 | BPS8 | Technology support is important criteria for evaluating service brands (T2) |
| | IT73 | BPS9 | Technology support is important in enhancing the identity of a brand (T2) |
| | IT74 | BPS10 | Brand X has an up-to-date technology support (T2) |
| | IT75 | BPS11 | Staff behaviour is an important source of building (service)brand identity (T3) |
| | IT76 | BPS12 | Staff behaviour is an important criteria in choosing a (service) brand (T3) |
| | IT77 | BPS13 | Staff behaviour plays an important role in building (service) brand identity (T3) |
| | IT78 | BPS14 | Quality factors are an important source of (service) brand identity (T4) |
| | IT79 | BPS15 | Credibility factors are an important source of (service) brand identity (T4) |
| | IT80 | BPS16 | Reliability factors are an important source of (service) brand identity (T4) |
| | IT81 | BPS17 | Service brands can present their identity through their staff (T5) |
| | IT82 | BPS18 | Well-trained and professional service staff play an important role in building (service) brand identity (T5) |
| | IT83 | BPS19 | Good staff behaviour is an important criteria for me to choose a service brand (T5) |
| | IT84 | BPS20 | The way the service staff deliver the service plays an important role in building brand identity (T5) |

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| | IT85 | BPS21 | Punctuality is an important criteria for evaluating a service brand (T5) |
| | IT86 | BPS22 | Service employee’s assistance is an important factor to form identity of a brand (T6) |
| | IT87 | BPS23 | Service employee’s assistance plays an important role in forming service brand identity (T6) |
| | IT88 | BPS24 | The level of consumer-staff interaction is important in forming a strong brand identity (T7) |
| | IT89 | BPS25 | The level of consumer-staff interaction is important in building a strong brand identity (T7) |
| | IT90 | BPS26 | If required, Brand X provides customized service to me (T8) |
| | IT91 | BPS27 | Brand X is skilled/proficient in providing customized service for me (T8) |
| | IT92 | BPS28 | It is important to maintain standardization of services for developing (service) brand identity (T8) |
| | IT93 | BPS29 | Brand X always provides standardized service (T8) |
| | IT94 | BPS30 | Service staff play an important role in standardization of service processes (T8) |
| | IT95 | BPS31 | The behaviour of service staff at brand X is very good (T8) |
| | IT96 | BPS32 | The service staff at brand X are very professional (T8) |
| | IT97 | BPS33 | Brand X has very professional service staff (T8) |
| | IT98 | BPS34 | Service staff at brand X make me feel very comfortable (T9) |
| | IT99 | BPS35 | Brand X’s service staff always make me feel comfortable (T9) |
| | IT100 | BPS36 | Brand X provides fairly flexible service (T9) |
| | IT101 | BPS37 | Services provided by Brand X are flexible and convenient (T9) |
| | IT102 | BPS38 | The website that loads quickly (Loiacono et al. 2007) |
| | IT103 | BPS39 | The website takes long to load (Loiacono et al. 2007) |
| | IT103 | BPS40 | The ease with which the website can be used (adapted from Loiacono et al. 2007) |
| | IT104 | BPS41 | The website labels that are easy to understand (Loiacono et al. 2007) |
| | IT105 | BPS42 | The ability to carry out online transactions through the website (adapted Loiacono et al. 2007) |
| | IT106 | BPS43 | The ability to complete most/all business processes via the website (adapted Loiacono et al. 2007) |
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| Brand-as-communication | IT107 | SCM1 | Advertisements are important in creating and developing brand identity (T1) |
| | IT108 | SCM2 | Brand X’s advertisements communicate its identity |

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| | | | (T1) |
| | IT109 | SCM3 | Advertising plays an important role in developing (service) brand identity (T3) |
| | IT110 | SCM4 | Advertising plays an important role in establishing (service) brand identity (T3) |
| | IT111 | SCM5 | Advertising plays an important role in communicating (service) brand identity (T3) |
| | IT112 | SCM6 | Word-of-Mouth plays an important role in influencing the decision to buy brand X (T4) |
| | IT113 | SCM7 | My decision to avail Brand X was influenced by my peers (T4) |
| | IT114 | SCM8 | I infer identity of Brand X from the celebrity who endorses it (T4) |
| | IT115 | SCM9 | I normally infer brand identity from the celebrity who endorses it(T4) |
| | IT116 | SCM10 | The positioning of a brand communicates its identity (T4) |
| | IT117 | SCM11 | The positioning of a brand contributes in building brand identity (T4) |
| | IT118 | SCM12 | The positioning of a brand is important contributing factor in building brand identity (T4) |
| | IT119 | SCM13 | Advertising is an important way to build brand identity (T4) |
| | IT120 | SCM14 | Advertising plays an important role in communicating brand identity (T4) |
| | IT121 | SCM15 | Communication plays an important role in building (service) brand identity (T5) |
| | IT122 | SCM16 | Communication with consumers play an important role in building (service) brand identity (T5) |
| | IT123 | SCM17 | Promotions play an important role in building brand identity (T6) |
| | IT124 | SCM18 | An appropriate positioning is important for developing brand identity (T8) |
| | IT125 | SCM19 | Brand X has a favourable position in my mind (T8) |
| | IT126 | SCM20 | Brand X has a strong positioning in my mind (T8) |
| | IT127 | SCM21 | Advertisements are important source of information for brand X (T9) |
| | IT128 | SCM22 | Brand X has information rich advertisements (T9) |
| | IT129 | SCM23 | Brand X’s advertisements are very catchy and informative (T9) |
| | IT130 | SCM24 | Use of celebrities for endorsing brand is a useful way to create brand identity (T9) |
| | IT131 | SCM25 | Celebrity endorsement is a useful way to create brand identity (T9) |

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| | IT132 | SCM26 | The celebrity endorsing brand X provide identity to the brand (T9) |
| | IT133 | SCM27 | The celebrity endorsing brand X create identity for the brand (T9) |
| | IT134 | SCM28 | Word of mouth plays crucial role in building brand identity (T9) |
| | IT135 | SCM29 | I chose brand X based on friends' or relatives' recommendation (T9) |
| | IT136 | SCM30 | The website allows interacting with it to receive tailored information (Loiacono et al. 2007) |
| | IT137 | SCM31 | The website adequately meets your information needs(Loiacono et al. 2007) |
| | | | |
| Brand-as-experience | IT138 | SEP1 | Providing a positive service experience is important for establishing brand identity (T2) |
| | IT139 | SEP2 | Service experience is an important source of building (service) brand identity (T5) |
| | IT140 | SEP3 | Strong relationship between consumer and brand is important for developing brand identity (T8) |
| | IT141 | SEP4 | Having a strong relationship with service brand is important for building brand identity (T8) |
| | IT142 | SEP5 | I have a strong relationship with brand X (T8) |
| | IT143 | SEP6 | Having a strong relationship with brand X is important for me (T8) |
| | IT144 | SEP7 | The first experience with brand X was important in determining whether I will continue with the brand (T9) |
| | IT145 | SEP8 | Reputation plays an important role in creating a strong brand identity in mind of consumers (T9) |
| | IT146 | SEP9 | Reputation of Brand X is important for me (T9) |
| | IT147 | SEP10 | Reputation of Brand X is a source of its brand identity (T9) |
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| Brand-as-Servicescape | IT148 | SSC1 | The environment where service is delivered plays an important role in developing (service) brand identity (T1) |
| | IT149 | SSC2 | A comfortable service environment plays an important role in developing (service) brand identity (T1) |
| | IT150 | SSC3 | Brand X offers comfortable service environment (T1) |
| | IT151 | SSC4 | Brand X's service environment plays an important role in developing its brand identity (T1) |
| | IT152 | SSC5 | Facilities are an important criteria on which I evaluate a service (T1) |

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| | IT153 | SSC6 | I evaluate services based on facilities they provide (T1) |
| | IT154 | SSC7 | I evaluate Brand X on facilities it provides (T1) |
| | IT155 | SSC8 | I will not chose Brand X if the interiors are not clean and tidy (T3) |
| | IT156 | SSC9 | I will not chose Brand X if the interiors are not clean and tidy even if the quality is good (T3) |
| | IT157 | SSC10 | Location is an important criteria when choosing a (service) brand (T3) |
| | IT158 | SSC11 | Shop ambience plays an important role in building brand identity (T4) |
| | IT159 | SSC12 | Shop ambience is an important criteria for choosing a service brand (T4) |
| | IT160 | SSC13 | The ‘appearance of place’ where service is delivered plays an important role in building brand identity (T5) |
| | IT161 | SSC14 | The appearance of service place is important in building (service) brand identity (T5) |
| | IT162 | SSC15 | Service atmosphere is an important source of building (service) brand identity (T5) |
| | IT163 | SSC16 | A clean and well-presented service place plays an important role in forming service brand identity (T6) |
| | IT164 | SSC17 | The overall presentation and appearance of a service place plays an important role in forming service brand identity (T6) |
| | IT165 | SSC18 | Clean and well-maintained facilities play an important role in building (service) brand identity (T7) |
| | IT166 | SSC19 | Brand X provides clean and well-maintained facilities (T7) |
| | IT167 | SSC20 | Brand X has clean and good counters (T7) |
| | | | |
| Brand-as-person | IT168 | BPN1 | The personality of brand X contributes in forming a distinct identity (Aaker, 1996) |

Table 44 List of 79 items obtained after Stage 1 review (168 items reduced to 79)

| Dimension | Item No. | Item code | Item statement[3] |
|---|---|---|---|
| Servicescape | IT148 | SSC1 | Brand X's service environment plays an important role in forming its brand identity (T1) |
| | IT149 | SSC2 | A comfortable service environment plays an important role in forming service brand identity (T1) |
| | IT151 | SSC4 | Brand X's service environment plays an important role in forming its brand identity (T1) |
| | IT153 | SSC6 | The facilities provided by brand X reflects its identity (T1) |
| | IT165 | SSC18 | Brand X's clean and well-maintained facilities play an important role in reflecting its brand identity (T7) |
| | IT160 | SSC13 | The 'appearance of place' where service is delivered plays an important role in reflecting brand identity (T5) |
| | IT161 | SSC14 | The appearance of brand X is important in reflecting its brand identity (T5) |
| | IT163 | SSC16 | A clean and well-presented service place plays an important role in forming service brand identity (T6) |
| | IT164 | SSC17 | Brand X's overall presentation and appearance plays an important role in forming its brand identity (T6) |
| | IT162 | SSC15 | Brand X's service atmosphere reflects its brand identity (T5) |
| | IT158 | SSC11 | Brand X's shop ambience plays an important role in reflecting its brand identity (T4) |
| | IT159 | SSC12 | Brand X's shop ambience plays an important role in forming the brand identity (T4) |
| | IT155 | SSC8 | The clean and tidy interiors of brand X reflects its identity (T3) |
| Service Communication | IT108 | SCM2 | Brand X's advertisements communicate its identity (T1) |
| | IT109 | SCM3 | Advertising plays an important role in shaping service brand identity (T3) |
| | IT111 | SCM5 | Advertising plays an important role in communicating (service) brand identity (T3) |
| | IT127 | SCM21 | Brand X's advertisements are an important source of |

[3] Source: T1 = Transcript 1; T2 = Transcript 2; T3= Transcript 3; T4=Transcript 4; T5=Transcript 5; T6=Transcript 6; T7=Transcript 7; T8=Transcript 8; T9=Transcript 9

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| | | | information for shaping its brand identity(T9) |
| | IT112 | SCM6 | Word-of-Mouth plays an important role in forming perception about brand identity (T4) |
| | IT134 | SCM28 | Word of mouth about brand X plays a crucial role in forming its brand identity (T9) |
| | IT116 | SCM10 | The positioning of brand X communicates its identity (T4) |
| | IT119 | SCM19 | Brand X's favourable positioning contributes in forming its brand identity (T8) |
| | IT114 | SCM8 | I infer identity of Brand X from the celebrity who endorses it (T4) |
| | IT131 | SCM25 | Celebrity endorsement is a useful way to create brand identity (T9) |
| | IT132 | SCM26 | The celebrity endorsing brand X provide identity to the brand (T9) |
| | IT123 | SCM17 | Brand X's promotions play an important role in shaping its brand identity (T6) |
| **Service Experience** | IT138 | SEP1 | Positive service experience provided by brand X is important in shaping its brand identity (T2) |
| | IT139 | SEP2 | Service experience with brand X is an important source of building its brand identity (T5) |
| | IT140 | SEP3 | My relationship with brand X plays crucial role in forming its brand identity (T8) |
| | IT141 | SEP4 | Having a strong relationship with service brand X is important for building brand identity (T8) |
| | IT145 | SEP8 | Reputation of brand X is an important factor in forming a strong brand identity in mind of consumers (T9) |
| | IT147 | SEP10 | Reputation of Brand X is a source of its brand identity (T9) |
| **Brand-as-Process** | IT65 | BPS1 | For brand X, the person who delivers the service plays an important role in shaping its brand identity (T1) |
| | IT81 | BPS17 | Service brand X can reflect its identity through their staff (T5) |
| | IT84 | BPS20 | The way the service staff deliver the service plays an important role in shaping brand identity (T5) |
| | IT87 | BPS23 | Service employee's assistance plays an important role in forming service brand identity (T6) |
| | IT71 | BPS7 | Brand X's well trained service staff reflect its identity (T2) |
| | IT82 | BPS18 | Well-trained and professional service staff play an important role in shaping service brand identity (T5) |
| | IT75 | BPS11 | Brand X's staff behaviour is an important source of forming service brand identity (T3) |
| | IT77 | BPS13 | Brand X's staff behaviour plays an important role in |

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| | | | shaping service brand identity (T3) |
| | IT88 | BPS24 | The level of consumer-staff interaction at brand X is important in forming a strong brand identity (T7) |
| | IT90 | BPS26 | Brand X's proficiency in providing customized service forms an important part of its identity (T8) |
| | IT92 | BPS28 | Brand X maintains standardization of services for developing strong brand identity (T8) |
| | IT78 | BPS14 | Brand X's quality factors are an important source of forming its brand identity (T4) |
| | IT79 | BPS15 | Brand X's credibility factors are an important source of forming its brand identity (T4) |
| | IT80 | BPS16 | Brand X's reliability factors are an important source of forming its brand identity (T4) |
| | IT73 | BPS9 | Brand X's technology support is important in reflecting its brand identity (T2) |
| **Brand-as-Product** | IT22 | BPT1 | Brand X's product design is very important in shaping a brand's identity (T1) |
| | IT30 | BPT9 | The degree to which brand X is easy-to-use is important in forming its brand identity (T3) |
| | IT39 | BPT18 | User-friendly features of brand X play an important role in shaping its identity (T5) |
| | IT31 | BPT10 | Value-added services provided by brand X play an important role in forming its brand identity (T3) |
| | IT37 | BPT16 | Complimentary services provided by brand X are important factors in forming its brand identity (T4) |
| | IT43 | BPT22 | Availability of brand X is an important criteria in forming its brand identity (T8) |
| | IT45 | BPT24 | Accessibility of brand X is important in forming its brand identity (T8) |
| | IT41 | BPT20 | Brand X's novel and unique service offering reflects its brand identity (T6) |
| | IT48 | BPT27 | I associate Brand X with its country of origin (Aaker 1996) |
| | IT49 | BPT28 | Brand X has a broad range of users (Aaker 1996) |
| | IT50 | BPT29 | Brand X has a limited spectrum of users (Aaker 1996) |
| **Brand-As-Organization** | IT52 | BOR1 | A brand can create its identity through the company CEO and people. (T1) (R) |
| | IT55 | BOR4 | Brand X gets part of its identity from the company CEO and people (T1) |
| | IT56 | BOR5 | Brand X's company's culture is important in shaping service brand identity (T1) |
| | IT57 | BOR6 | Company's culture that is embedded in the brand helps in shaping brand identity(T1) |
| | IT59 | BOR8 | Brand X's company culture is an important source of its |

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| | | | identity (T1) |
| | IT60 | BOR9 | The philosophy of brand X is an important factor in shaping its brand identity (T7) |
| | IT53 | BOR2 | Brand X's identity emanates from the kind of brand its company CEO and people want to create (T1) |
| | IT54 | BOR3 | Brand X's identity emanates from the idea its company CEO and people want to embed in the brand (T1) |
| | IT61 | BOR10 | Social responsibility initiatives by brand X play an important role in forming its brand identity (T7) |
| **Brand-as-Symbol** | IT3 | BSM3 | Brand X's name plays an important role in reflecting its identity (T2) |
| | IT20 | BSM20 | The name of brand X conveys its identity (adapted from Berry 1988) |
| | IT5 | BSM5 | Brand X has a long history and good record for shaping its identity (T2) |
| | IT9 | BSM9 | The history of the brand X is an important source of its brand identity (T4) |
| | IT18 | BSM18 | Brand X's heritage represents its identity (Aaker 1996) |
| | IT8 | BSM8 | Use of a particular colour plays an important role in symbolising (service) brand identity (T4) |
| | IT15 | BSM15 | Brand X's logo colour play an important role in forming its brand identity (T6) |
| | IT16 | BSM16 | Colours used in brand X's design play an important role in forming its brand identity (T6) |
| | IT13 | BSM13 | Brand X's packaging play an important role in forming its brand identity (T6) |
| | IT12 | BSM12 | The looks of brand X are important in shaping its brand identity (T4) |
| | IT17 | BSM17 | Brand X's symbol contributes to its identity (Aaker 1996) |
| | IT19 | BSM19 | The logo of Brand X is an important part of its identity (Aaker 1996) |
| **Brand as person** | IT168 | BPN1 | The personality of brand X contributes in forming a distinct identity (Aaker, 1996) |

# APPENDIX C

**Table 95 Correlation Matrix**

| | item1 | item2 | item3 | item4 | item6 | item7 | item8 | item11 | item12 | item13 | item14 | item15 | item16 | item19 | item20 | item21 | item22 | item24 | item25 | item26 | item27 | item28 | item29 | item31 | item32 | item33 | item34 | item35 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| item1 | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| item2 | 0.70 | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| item3 | 0.35 | 0.37 | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | | |
| item4 | 0.54 | 0.57 | 0.55 | 1.00 | | | | | | | | | | | | | | | | | | | | | | | | |
| item6 | 0.33 | 0.24 | -0.01 | 0.18 | 1.00 | | | | | | | | | | | | | | | | | | | | | | | |
| item7 | 0.53 | 0.59 | 0.39 | 0.47 | 0.17 | 1.00 | | | | | | | | | | | | | | | | | | | | | | |
| item8 | 0.54 | 0.41 | 0.15 | 0.35 | 0.23 | 0.47 | 1.00 | | | | | | | | | | | | | | | | | | | | | |
| item11 | 0.37 | 0.37 | 0.40 | 0.40 | 0.31 | 0.22 | 0.24 | 1.00 | | | | | | | | | | | | | | | | | | | | |
| item12 | 0.29 | 0.21 | 0.01 | 0.17 | 0.75 | 0.16 | 0.25 | 0.38 | 1.00 | | | | | | | | | | | | | | | | | | | |
| item13 | 0.37 | 0.28 | 0.29 | 0.32 | 0.36 | 0.32 | 0.27 | 0.38 | 0.49 | 1.00 | | | | | | | | | | | | | | | | | | |
| item14 | 0.36 | 0.30 | 0.09 | 0.25 | 0.60 | 0.24 | 0.33 | 0.31 | 0.70 | 0.59 | 1.00 | | | | | | | | | | | | | | | | | |
| item15 | 0.53 | 0.47 | 0.26 | 0.44 | 0.33 | 0.42 | 0.46 | 0.38 | 0.44 | 0.37 | 0.51 | 1.00 | | | | | | | | | | | | | | | | |
| item16 | 0.33 | 0.30 | 0.15 | 0.23 | 0.40 | 0.26 | 0.23 | 0.34 | 0.53 | 0.42 | 0.59 | 0.50 | 1.00 | | | | | | | | | | | | | | | |
| item19 | 0.36 | 0.32 | 0.10 | 0.24 | 0.40 | 0.24 | 0.31 | 0.29 | 0.48 | 0.39 | 0.51 | 0.44 | 0.68 | 1.00 | | | | | | | | | | | | | | |
| item20 | 0.42 | 0.36 | 0.42 | 0.47 | 0.19 | 0.25 | 0.30 | 0.45 | 0.24 | 0.34 | 0.31 | 0.45 | 0.36 | 0.37 | 1.00 | | | | | | | | | | | | | |
| item21 | 0.22 | 0.16 | -0.02 | 0.13 | 0.60 | 0.08 | 0.16 | 0.27 | 0.62 | 0.38 | 0.53 | 0.31 | 0.39 | 0.45 | 0.24 | 1.00 | | | | | | | | | | | | |
| item22 | 0.31 | 0.28 | 0.33 | 0.38 | 0.28 | 0.21 | 0.12 | 0.33 | 0.35 | 0.32 | 0.31 | 0.35 | 0.34 | 0.38 | 0.60 | 0.32 | 1.00 | | | | | | | | | | | |
| item24 | 0.29 | 0.25 | 0.07 | 0.21 | 0.35 | 0.17 | 0.17 | 0.21 | 0.40 | 0.38 | 0.39 | 0.26 | 0.45 | 0.51 | 0.38 | 0.48 | 0.53 | 1.00 | | | | | | | | | | |
| item25 | 0.37 | 0.26 | 0.22 | 0.31 | 0.38 | 0.24 | 0.36 | 0.37 | 0.48 | 0.36 | 0.41 | 0.54 | 0.43 | 0.52 | 0.39 | 0.46 | 0.40 | 0.46 | 1.00 | | | | | | | | | |
| item26 | 0.34 | 0.23 | 0.10 | 0.24 | 0.55 | 0.15 | 0.25 | 0.34 | 0.62 | 0.46 | 0.52 | 0.34 | 0.51 | 0.53 | 0.28 | 0.63 | 0.36 | 0.53 | 0.56 | 1.00 | | | | | | | | |
| item27 | 0.37 | 0.27 | 0.26 | 0.20 | 0.41 | 0.31 | 0.31 | 0.33 | 0.44 | 0.61 | 0.50 | 0.40 | 0.48 | 0.47 | 0.36 | 0.43 | 0.41 | 0.48 | 0.50 | 0.57 | 1.00 | | | | | | | |
| item28 | 0.43 | 0.34 | 0.39 | 0.41 | 0.20 | 0.31 | 0.35 | 0.37 | 0.30 | 0.35 | 0.29 | 0.43 | 0.34 | 0.32 | 0.50 | 0.28 | 0.43 | 0.36 | 0.55 | 0.37 | 0.48 | 1.00 | | | | | | |
| item29 | 0.25 | 0.24 | 0.05 | 0.23 | 0.61 | 0.14 | 0.21 | 0.26 | 0.64 | 0.38 | 0.56 | 0.38 | 0.44 | 0.48 | 0.27 | 0.66 | 0.38 | 0.49 | 0.47 | 0.65 | 0.46 | 0.34 | 1.00 | | | | | |
| item31 | 0.42 | 0.39 | 0.39 | 0.42 | 0.20 | 0.35 | 0.34 | 0.31 | 0.29 | 0.28 | 0.24 | 0.52 | 0.35 | 0.38 | 0.47 | 0.33 | 0.47 | 0.39 | 0.61 | 0.39 | 0.41 | 0.65 | 0.36 | 1.00 | | | | |
| item32 | 0.36 | 0.25 | 0.26 | 0.26 | 0.31 | 0.32 | 0.33 | 0.28 | 0.40 | 0.58 | 0.46 | 0.40 | 0.47 | 0.47 | 0.39 | 0.40 | 0.38 | 0.51 | 0.50 | 0.55 | 0.77 | 0.51 | 0.49 | 0.52 | 1.00 | | | |
| item33 | 0.44 | 0.41 | 0.45 | 0.32 | 0.08 | 0.39 | 0.35 | 0.35 | 0.16 | 0.40 | 0.25 | 0.42 | 0.36 | 0.32 | 0.52 | 0.14 | 0.38 | 0.37 | 0.37 | 0.25 | 0.52 | 0.59 | 0.20 | 0.53 | | 1.00 | | |
| item34 | 0.34 | 0.37 | 0.29 | 0.33 | 0.13 | 0.31 | 0.33 | 0.24 | 0.24 | 0.24 | 0.20 | 0.47 | 0.29 | 0.31 | 0.40 | 0.23 | 0.40 | 0.38 | 0.57 | 0.27 | 0.38 | 0.60 | 0.24 | 0.69 | | | 1.00 | |
| item35 | 0.41 | 0.43 | 0.47 | 0.38 | 0.03 | 0.45 | 0.38 | 0.30 | 0.11 | 0.34 | 0.15 | 0.42 | 0.31 | 0.28 | 0.42 | 0.04 | 0.37 | 0.31 | 0.34 | 0.21 | 0.45 | 0.58 | 0.17 | 0.56 | | | | 1.00 |

# APPENDIX D

**Table 46 Anti-image Correlation Matrix**

| | item 1 | item 2 | item3 | item4 | item6 | item7 | item8 | item11 | item12 | item13 | item14 | item15 | item16 | item19 | item20 | item21 | item22 | item24 | item25 | item26 | item27 | item28 | item29 | item31 | item32 | item33 | item34 | item35 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| item1 | **.91**[a] | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| item2 | -.45 | **.88**[a] | | | | | | | | | | | | | | | | | | | | | | | | | | |
| item3 | -.02 | .03 | **.88**[a] | | | | | | | | | | | | | | | | | | | | | | | | | |
| item4 | -.08 | -.20 | -.33 | **.91**[a] | | | | | | | | | | | | | | | | | | | | | | | | |
| item6 | -.15 | -.01 | .03 | -.04 | **.91**[a] | | | | | | | | | | | | | | | | | | | | | | | |
| item7 | -.05 | -.29 | -.15 | -.10 | -.04 | **.92**[a] | | | | | | | | | | | | | | | | | | | | | | |
| item8 | -.24 | .07 | .18 | -.06 | -.02 | -.23 | **.91**[a] | | | | | | | | | | | | | | | | | | | | | |
| item11 | .04 | -.17 | -.20 | -.06 | -.04 | .13 | -.03 | **.93**[a] | | | | | | | | | | | | | | | | | | | | |
| item12 | .01 | .09 | .07 | .09 | -.43 | -.03 | .00 | -.17 | **.92**[a] | | | | | | | | | | | | | | | | | | | |
| item13 | -.05 | .08 | -.07 | -.12 | .10 | -.08 | .06 | -.11 | -.15 | **.93**[a] | | | | | | | | | | | | | | | | | | |
| item14 | .06 | -.10 | -.02 | -.02 | -.11 | .06 | -.13 | .13 | -.26 | -.31 | **.93**[a] | | | | | | | | | | | | | | | | | |
| item15 | -.17 | -.01 | .11 | -.11 | .08 | -.06 | -.07 | -.05 | -.07 | .04 | -.21 | **.94**[a] | | | | | | | | | | | | | | | | |
| item16 | .04 | .02 | -.01 | .04 | .02 | -.08 | .15 | -.07 | -.12 | .07 | -.22 | -.19 | **.92**[a] | | | | | | | | | | | | | | | |
| item19 | -.01 | -.08 | .06 | .02 | .03 | .03 | -.11 | .03 | .00 | .00 | -.01 | .02 | -.44 | **.94**[a] | | | | | | | | | | | | | | |
| item20 | -.04 | .03 | -.08 | -.13 | .01 | .12 | -.11 | -.17 | .09 | .00 | -.04 | -.10 | -.03 | -.06 | **.92**[a] | | | | | | | | | | | | | |
| item21 | .03 | .00 | .04 | .07 | -.16 | -.01 | .03 | -.06 | -.05 | -.07 | -.06 | -.01 | .07 | -.05 | -.03 | **.94**[a] | | | | | | | | | | | | |
| item22 | .00 | .03 | -.08 | -.07 | -.01 | -.02 | .17 | .01 | -.12 | .02 | .02 | .00 | .06 | -.04 | -.39 | .04 | **.91**[a] | | | | | | | | | | | |
| item24 | -.06 | -.04 | .18 | -.04 | .00 | .01 | .07 | .07 | .06 | -.04 | -.01 | .20 | -.10 | -.11 | -.03 | -.14 | -.30 | **.93**[a] | | | | | | | | | | |
| item25 | -.01 | .14 | -.04 | .00 | -.01 | -.02 | -.07 | -.12 | -.03 | .02 | .02 | -.21 | .09 | -.19 | .03 | .00 | .03 | -.11 | **.94**[a] | | | | | | | | | |
| item26 | -.10 | .01 | .00 | -.08 | -.02 | .12 | -.03 | -.04 | -.12 | -.02 | .05 | .13 | -.12 | -.03 | .05 | -.19 | .03 | -.10 | -.19 | **.95**[a] | | | | | | | | |
| item27 | .02 | -.02 | -.07 | .18 | -.17 | -.03 | .00 | -.02 | .10 | -.18 | -.03 | -.05 | .00 | -.03 | .07 | -.04 | -.13 | .03 | -.07 | -.15 | **.92**[a] | | | | | | | |
| item28 | -.12 | .09 | .01 | -.11 | .06 | .05 | -.01 | -.05 | -.05 | .06 | -.04 | .12 | -.04 | .10 | -.10 | -.03 | -.01 | .07 | -.17 | .03 | -.08 | **.96**[a] | | | | | | |
| item29 | .15 | -.10 | .02 | -.07 | -.15 | .04 | .03 | .08 | -.15 | .10 | -.08 | -.09 | .08 | -.06 | .02 | -.24 | -.05 | -.08 | .00 | -.20 | .06 | -.07 | **.94**[a] | | | | | |
| item31 | -.01 | -.04 | -.13 | .00 | .00 | -.01 | .00 | .06 | .01 | .06 | .12 | -.15 | .01 | -.03 | .00 | -.13 | -.12 | .03 | -.16 | -.05 | .15 | -.21 | -.02 | **.94**[a] | | | | |
| item32 | -.04 | .12 | .00 | .00 | .11 | -.08 | -.04 | .05 | .03 | -.19 | -.02 | .05 | -.06 | -.01 | -.06 | .06 | .10 | -.13 | .03 | -.07 | -.51 | -.04 | -.17 | -.20 | **.92**[a] | | | |
| item33 | -.10 | -.02 | -.09 | .16 | .05 | -.01 | .01 | -.05 | .06 | -.06 | -.05 | .00 | -.04 | .01 | -.22 | -.02 | .10 | -.11 | .06 | .06 | -.15 | -.13 | .00 | .00 | .05 | **.92**[a] | | |
| item34 | .13 | -.15 | .06 | -.03 | .04 | .05 | -.04 | .10 | -.11 | .07 | .04 | -.08 | .02 | .06 | .02 | -.05 | -.05 | -.08 | -.27 | .08 | .02 | -.11 | .11 | -.27 | -.06 | -.13 | **.93**[a] | |
| item35 | .09 | -.07 | -.12 | .00 | .04 | -.08 | -.14 | .00 | -.01 | -.08 | .13 | -.08 | -.04 | -.02 | .11 | .18 | -.07 | -.04 | .13 | -.04 | -.06 | -.13 | -.05 | -.09 | .01 | -.46 | -.18 | **.907**[a] |

a. Measures of Sampling Adequacy(MSA)

# APPENDIX E

Main (Final) Survey Instrument

Q1 WELCOME Thank you for participating in the survey on 'Sources of Brand Identity'. This survey aims to identify the factors that can contribute towards building a strong brand identity for service brands. The survey takes around 10-15 minutes to complete. Your responses will be used only for research purposes and will be held securely. Cookies, personal data stored by your Web browser, are not used in this survey. You are free to leave the survey at any point of time if you feel so. By clicking on the CONTINUE button at the bottom of this page, you agree to participate in the survey with your consent.

Q2 Please answer the following questions: Please tick the appropriate box to indicate your age group:

- ❍ Less than 20 years old (1)
- ❍ 20-29 years old (2)
- ❍ 30-39 years old (3)
- ❍ 40-49 years old (4)
- ❍ 50-59 years old (5)
- ❍ 60 years old or over (6)

Q3 Please indicate your nationality: __________

Q4 Please think of your favourite service brand in any one of the following categories. Please select the category you have chosen:

- ❍ Hair Salon (1)
- ❍ Banking (2)
- ❍ Hotels (3)
- ❍ Airlines (4)

Q5 Please enter the name of your chosen brand here:__________

Q6 Sources of Brand Identity: The next two questions seek your level of agreement or disagreement, on a scale of 1 to 7, with certain statements related to the brand you have chosen. There are no right or wrong answers as I am primarily interested in your opinion and in the numbers that best highlight your level of agreement or disagreement. On a scale of 1 to 7 with '1' meaning strongly disagree and '7' meaning strongly agree, please indicate the extent to which you agree or disagree that each of the following contributes towards building a brand identity for your chosen service brand (Brand X).

| | Strongly Disagree1 (1) | Moderately Disagree2 (2) | Mildly Disagree3 (3) | Neither Agree nor Disagree4 (4) | Mildly Agree5 (5) | Moderately Agree6 (6) | Strongly Agree7 (7) |
|---|---|---|---|---|---|---|---|
| The name of brand X (1) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The logo or symbols used to identify brand X (2) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The celebrity endorsement associated with brand X (3) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The advertising | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| used by brand X (4) | | | | | | | |
| The behaviour of staff delivering brand X (5) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The colour(s) associated with brand X (6) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The country of origin of brand X (7) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The word-of-mouth communication from other consumers (face-to-face or social media) related to brand X (8) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The expertise of staff working for brand X (9) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The appearance of the delivery environment used by brand X (10) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The quality of interaction with staff delivering brand X (11) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The company culture associated with brand X (12) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Your relationship with the people providing brand X (13) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

Q7 On a scale of 1 to 7 with '1' meaning strongly disagree and '7' meaning strongly agree, please indicate the extent to which you agree or disagree that each of the following contributes towards building a brand identity for your chosen service brand (Brand X).

| | Strongly Disagree1 (1) | Moderately Disagree2 (2) | Mildly Disagree3 (3) | Neither Agree nor Disagree4 (4) | Mildly Agree5 (5) | Moderately Agree6 (6) | Strongly Agree7 (7) |
|---|---|---|---|---|---|---|---|
| The reliability of brand X over time (1) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Your relationship with brand X (2) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Promotions carried out by brand X (3) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The quality of the service provided by brand X (4) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The value-added benefits offered by brand X (5) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The accessibility of brand X (6) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The values projected by brand X (7) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The quality of the delivery of brand X (8) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The ambience in brand X's delivery environment (9) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Public Relations (PR) activities associated with brand X (10) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The consistency of service of | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| brand X (11) | | | | | | | |
| The company vision associated with brand X (12) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The general environment in which brand X is delivered (13) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| Your relationship with other customers using brand X (14) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The social responsibility projected by brand X (15) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| I am reading all the statements carefully (select strongly agree option) (16) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |
| The customers who buy brand X (17) | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ | ❍ |