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# Determinants of organizational performance in the semi-government sector of Abu Dhabi: Strategic management perspective

Bakheet Saeed Al Katheeri

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جامعة الإمارات العربية المتحدة  
United Arab Emirates University

United Arab Emirates University

College of Business and Economics

DETERMINANTS OF ORGANIZATIONAL PERFORMANCE IN  
THE SEMI-GOVERNMENT SECTOR OF ABU DHABI: STRATEGIC  
MANAGEMENT PERSPECTIVE

Bakheet Saeed Al Katheeri

This dissertation is submitted in partial fulfilment of the requirements for the  
degree of Doctorate of Business Administration

Under the Supervision of Dr. Said Elbanna

May 2016

### **Declaration of Original Work**

I, Bakheet Al Katheeri, the undersigned, a graduate student at the United Arab Emirates University (UAEU), and the author of this dissertation entitled "*Determinants of Organizational Performance in the Semi-Government Sector of Abu Dhabi: A Strategic Management Perspective*", hereby, solemnly declare that this dissertation is my own original research work that has been done and prepared by me under the supervision of Dr. Said Elbanna, in the College of Business and Economic at Qatar University. This work has not previously been presented or published, or formed the basis for the award of any academic degree, diploma or a similar title at this or any other university. Any materials borrowed from other sources (whether published or unpublished) and relied upon or included in my dissertation have been properly cited and acknowledged in accordance with appropriate academic conventions. I further declare that there is no potential conflict of interest with respect to the research, data collection, authorship, presentation and/or publication of this dissertation.

Student's Signature \_\_\_\_\_

Date \_\_\_\_\_

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## **Advisory Committee**

1) Advisor: Dr. Said Elbanna

Title: Associate Professor of Strategic Management

College of Business and Economic at Qatar University, Qatar

2) Co-advisor: Dr. Mustafa Colak

Title: Assistant Professor of Strategic Management

Faculty of Political Science at Social Sciences University of Ankara, Turkey

**APPROVED BY**

This Doctorate Dissertation is approved by the following Examining Committee


Members:

- 1. Advisor: Dr. Said Elbanna

Title: Associate Professor

Department: Management and Marketing

College of Business and Economics, Qatar University

Signature  \_\_\_\_\_

Date 23/5/2016

- 2. Member: Dr. James Ryan

Title: Associate Professor

Department: Business Administration

College of Business and Economics: UAE University

Signature  \_\_\_\_\_


Date 23/5/2016

- 3. Member: Dr. Samir Emam

Title: Associate Professor

Department: Mechanical Engineering

College of Engineering, UAE University

Signature  \_\_\_\_\_


Date 23/5/2016

- 4. Member (External Examiner): Dr. Marin Alexandrov Marinov

Title: Professor

Department: BUSINESS MANAGEMENT

Institution/University: Aalborg University, Denmark

Signature  \_\_\_\_\_


Date 23/5/2016

This Doctorate Dissertation is accepted by:

Dean of the College of Business and Economics: Professor Geralyn Franklin

Signature  Date 7/6/2016

Dean of the College of the Graduate Studies: Professor Nagi T. Wakim

Signature  Date 21/6/2016

## Abstract

With a conceptual model, we focused on evaluating the current situation of strategic management practices in Abu Dhabi's semi-government sector, a little-researched area, to understand the relationships between strategy formulation, implementation and evaluation, as elements, and organizational performance; to identify whether environmental dynamism plays moderating roles in these relationships; and to explore the relationship between organisational performance and organizational competitiveness. Data were collected in Abu Dhabi from semi-government organizations of the UAE. A questionnaire was used on a sample population of 210 organizations. 182 completed questionnaires were collected and included in the analysis. The structural equation modelling package, AMOS, was used to test the hypotheses shown in the conceptual model of the study. Our findings suggest that one dimension of strategy formulation (namely, the intensity of strategic planning), the two dimensions of strategy implementation (namely, the comprehensiveness and the alignment of strategic plan implementation), and those of strategy evaluation (namely, accountability and strategic control) are positively related to organizational performance. We found also that environmental dynamism plays a moderating role in most of these relationships and organizational performance significantly influences organizational competitiveness. The academic and managerial implications of these findings for both scholars and practitioners are discussed.

**Keywords:** Strategic management, Abu Dhabi's semi-government sector, strategy formulation, implementation and evaluation, organisational performance and organizational competitiveness.



## Title and Abstract (in Arabic)

### محددات الأداء التنظيمي في قطاع أبو ظبي شبه الحكومي: منظور الإدارة الاستراتيجية

#### الملخص

باستخدام نموذج نظري، قمنا بالتركيز على تقييم الوضع الحالي لممارسات الإدارة الاستراتيجية في القطاع شبه الحكومي في اماره أبو ظبي بدوله الإمارات العربية المتحدة وهو موضوع غير مدروس بشكل كافي، وذلك لفهم العلاقات بين صياغة الاستراتيجية وتطبيقها وتقييمها، كعناصر رئيسية، وبين أداء المنظمة. وتهدف هذه الدراسة أيضاً الى تحديد فيما لو كانت ديناميكية البيئة المحيطة تلعب دوراً وسيطاً في هذه العلاقات وأن تستكشف العلاقة بين أداء المنظمة وقدرة المنظمه التنافسية . لقد تم تجميع البيانات الخاصه بهذه الدراسة من منظمات القطاع شبه الحكومي في اماره أبو ظبي بدولة الإمارات العربية المتحدة. ولقد تم استهداف عينة تضم ٢١٠ منظمة شبه حكومية. ومن بين تلك المنظمات، تم النجاح في تجميع ١٨٢ استبياناً وتم استخدامها في تحليل البيانات. ولقد استخدمنا برنامج محاكاة المعادلة الهيكلية، (أموس)، لاختبار فروض النموذج النظري للدراسة. وتُظهر نتائج الدراسة أن بعداً واحداً من بعدي صياغة الإستراتيجية، وبالتحديد كثافة التخطيط الاستراتيجي، والبعدين المتعلقين بتطبيق الاستراتيجية، وبالتحديد شمولية وتوافق تطبيق الخطة الاستراتيجية، والبعدين المتعلقين بتقييم الاستراتيجية، وبالتحديد المسائلة والرقابة الاستراتيجية، مرتبطين إيجابياً بأداء المنظمة. وقد استنتجنا أيضاً أن ديناميكية البيئة المحيطة لها دور وسيط في أغلب هذه العلاقات وأن أداء المنظمة يؤثر تأثيراً معنوياً على القدرة التنافسية التنظيمية. وسناقش في هذه الدراسة التطبيقات الأكاديمية والعملية لهذه النتائج بالنسبة لكل من الباحثين والممارسين.

مفاهيم البحث الرئيسية: الإدارة الاستراتيجية ، القطاع شبه الحكومي في اماره أبو ظبي .

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Although it is my name alone that is on the front cover of this thesis, I am by no means the only contributor. Rather, a number of people are behind this piece of work, who deserve to be both acknowledged and thanked here.

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*For all, I will always be grateful.*

## **Dedication**

*To H.E. Suhail Mohammed Al Mazroui, The Minister of Energy in the UAE for his inspiration and encouragement.*

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## **Chapter 1: Introduction**

### **1.1 Overview**

Strategic management is an increasingly important activity for many organizations, including those in less-researched, non-Western countries, such as the United Arab Emirates (UAE). Although the amount of research on this area is vast, in particular in Western countries, a number of notable gaps certainly remain in the literature. This chapter begins with an overview of the background to the present research, before describing its focus: understanding the relationship between strategic planning, implementation and evaluation on one side, and organizational performance on the other. The discussion then turns to describing the Abu Dhabi emirate, as the research context. Then the chapter sets out the research objectives and questions, in addition to the academic contribution that the research is hoped to make to the strategic management literature. The chapter concludes with an overview of the structure of the thesis, highlighting the issues to be discussed in each of the forthcoming chapters.

### **1.2 Theoretical Context of the Study**

The last few decades have seen phenomenal transformations in the way that organizations work. These transformations have paved the way for new work practices and technologies enabling businesses to cope with changing economic and social consequences in an increasingly global marketplace (Mulcasteri, 2009). However, to tackle the new economic and social conditions, both internal and external, organizations are using strategies to achieve high levels of strategic alignment and consistency (Mckeown, 2012).

As businesses evolved, strategic management was introduced to increase management's ability to develop plans, policies and structures (Neilson, Martin, & Powers, 2008). According to David (2011), strategic management allowed organizations to assess and re-assess strategies, competitors, new economic situations and technology. Through strategic management, organizations learnt to make timely business decisions and deal with an increasingly uncertain future.

The fundamental definition of strategic management derives from the basic meaning of 'strategy'. The works of Chandler (1962) and Ansoff (1965) provide the first definitions of strategy and the foundation for the field. Chandler (1962, p. 16) defines strategy as "the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals".

In the current literature, normative models of strategic management have depicted it as a process with three key stages or elements: strategy formulation, strategy implementation, and strategy evaluation and control (Preble, 1992). Strategy formulation refers to establishing the vision, mission, and long-term objectives and generating and identifying strategic options to strengthen the competitive position of the company. Strategy implementation is concerned primarily with the modification of organizational structures and processes to ensure that the planned results are obtained (Galbraith & Kazanjian, 1986; Lorange & Murphy, 1984). This stage requires the building of an organization capable of performing a successful strategy, setting budgets, developing administrative support systems, and devising performance reward systems and an organizational culture model to match the strategy. Strategy evaluation

and control aims to highlight and generate solutions to correct any deviations from the outcomes that the implemented strategies were expected to generate.

Researchers have been interested in studying the relationship of strategy formulation, implementation, and evaluation to organizational performance. For example, many studies seek to elucidate the relationship between strategic planning or strategy formulation and organizational performance. The results of this body of research are fragmented, however, and no consensus has yet emerged (Elbanna & Child, 2007; Falshaw, Glaister, & Tatoglu, 2006). Previous research provides support for all possible relationships: a positive relationship (Andrews, Boyne, Law, & Walker, 2011; Sarason & Tegarden, 2003); a negative relationship (Fredrickson & Mitchell, 1984); no relationship (Robinson & Pearce, 1983); and a complex relationship (Fredrickson & Mitchell, 1984; Poister, Edwards, Pasha, & Edwards, 2013). However, it is usually accepted that the practice of strategic planning benefits organizations (Sarason & Tegarden, 2003); and that, over time, the use of tools for strategic planning will enhance organization performance (Elbanna, 2008).

The relationship between strategy implementation and organizational performance has also been addressed by many researchers. White, Conant, and Echambadi (2003) have suggested that firms that excel at implementing strategy have significantly greater firm performance. Similarly, the marketing strategy literature suggests that the effective implementation of planned marketing strategy is a key driver of firm performance (Olson, Chae, & Sheu, 2005). Morgan, Katsikeas, and Vorhies (2012) find that effective implementation of planned export marketing strategy contributes to export market and financial performance. More recently, Elbanna and Fadol (2016) report a significant linkage between the comprehensive implementation of strategic plans and their effectiveness.

Researchers point out that many benefits result from conducting strategy evaluation (Guyadeen & Seasons, 2015). Evaluations support constant improvement in the profession (Balsas, 2012; Oliveira & Pinho, 2011). By conducting evaluation, managers can improve both the planning process and the implementation of plans, thus achieving intended outcomes (Seasons, 2003) and improving organizational performance. Strategy evaluation has a positive impact on outcomes, which include strategic direction, fit with the environment, communication with stakeholders and performance (Elbanna, 2013).

Although we can find plenty of empirical studies on any of the above three elements of the strategic management process, namely, strategy formulation, implementation and evaluation, it is hard to find one study that incorporates all three elements in a single work, as we do in the present research. This is a significant contribution on the part of this study, which contributes to filling a serious gap in the literature of strategic management.

Another contribution of this study is its empirical examination of the three processes of strategic management in semi-government organizations. Organizations may be classified as pure government, quasi- or semi-government organizations, and purely private organizations. According to Moe (2001), the second category consists of state owned corporations, business enterprises or public sector undertakings created for the purpose of commercial activity by the government itself. Semi-government organizations occupy a putative terrain which exists between the government and the private sectors and functions across the political realm for five different purposes – to prevent the presence and growth of bureaucracy; develop new sources for revenue; exempt advocates of agencies from management laws; provide a basis for new public

management using economically-focused values; and propagate entity-specific laws and regulations for management flexibility (Kosar, 2011).

While strategic management across private organizations is a well-researched subject, strategic management processes across the public sector have received less than their due attention from researchers (Elbanna, Andrews, & Pollanen, 2015; Furrer, 2008). Private sector organizations have paid active attention to strategic management since the 1950s, whereas, according to Poister and Streib (2005), strategic management was introduced into the public sector only three decades ago.

Previously, the literature focused on public and/or private organizations but little or no attention went to semi-government organizations. In the semi-government organizations, generalized applications of either public sector or private sector strategic management processes or practices are implied (Elbanna, 2007). Therefore, it is helpful to understand the relevance and value of strategic management for the purpose of better managing semi-government bodies.

While government organizations are operated solely by political entities in government, semi-government organizations are elected agencies usually controlled by the government (Hudson & Lowe, 2009). Nevertheless, organizations which are between public and private have different strategic management practices from semi-government organizations. The differences in the core definitions of organizations between the public and private sectors and those in the semi-government sector demand separate research in the strategic management field.

Another contribution of the present research is its use of a non-Western country (i.e., the UAE) as the source of its data. Most of the available literature on strategic

management focuses on practices in Western countries (Streib, Slotkin, & Rivera, 2001). However, while descriptive research on the public sector and the practical application of the findings are widely found in Western accounts of public and private organizations, they are scarce even from academic writers in the UAE. In a recent study, Elbanna (2013) states that little academic knowledge is available on strategic management practices in the UAE public sector. He adds that it is unclear which stage of practice the UAE public sector organizations have reached: do they plan in order to achieve, plan to act or plan to act effectively and positively influence organizational performance and the quality of service delivery? Hence, this study aims to examine strategic management practices where little research has been done – in semi-government organizations in general, and in those of the UAE in particular.

Finally, this research is concerned with the role of the environment of the strategy process. Many scholars have discussed the impact of the environment on strategy processes and organizational performance (Goll & Rasheed, 2004). They argue that strategy processes are influenced by such environmental attributes as uncertainty, complexity, munificence, and dynamism (Dess & Beard, 1984; Hutzschenreuter & Kleindienst, 2006; Sharfman & Dean, 1991; Shepherd & Rudd, 2014). Thus, it would be interesting to discuss the moderating role of the environment on the relationship of strategy formulation, implementation, and evaluation to organizational performance.

In sum, this study contributes to the literature of strategic management by incorporating the three main elements of the strategy process, namely formulation, implementation and control, in one model and by examining this model in the less

researched semi-government sector in a region where little research on strategy can be found, the Arab Middle East in general and the UAE in particular.

### **1.3 Abu Dhabi as the Research Context**

The UAE is one of the most prosperous countries in the Middle East. It is globally known for its liberal economic policies, diverse workforce and multicultural environment (Fadol, Barhem, Elbanna, Adcroft, & Bruce, 2015). Apart from being politically stable, the UAE offers lucrative business opportunities and relatively high returns on investments (Schwab & Sala-i-Martin, 2012). Correspondingly, the government restrictions on businesses are minimal and the infrastructure in the country is highly developed. The UAE government also plans to develop new infrastructural projects which can aid and consolidate the process of the nation's economic development (Schwab & Sala-i-Martin, 2012).

At the heart of the UAE lies Abu Dhabi, the emirate which is its capital, one of the most dynamic capitals in the world today. Over the course of the last few decades, Abu Dhabi has undergone rapid transformation in terms of both economic and social development (DED, 2011). Primarily, the economy of Abu Dhabi is based on rich oil and gas resources, which give the country one of the highest Gross Domestic Product (GDP) per capita incomes in the world.

Government-owned firms control most of the world's oil reserves. Governments are also known as the most significant oil producers in the world (Bremmer, 2010). The UAE holds an estimated seven percent (7%) of the world's proven oil reserves and produces 2.7 million barrels of oil per day (EIA, 2013). According to the Oil & Gas Journal estimates as of January 2015, the UAE holds the

seventh largest proved reserves of oil in the world, at 97.8 billion barrels, with most of the reserves located in Abu Dhabi, which accounts for approximately ninety-four percent (94%) of the UAE's total (U.S. Energy information administration, 2015).

Thus, the huge natural resources provide rich economic sustenance and conditions for growth. However, in the last decade, Abu Dhabi has encountered a challenge in diversifying its economy and building a durable basis for sustained long-term growth and prosperity (IKED, 2010). Given the limited presence of other natural resources and its heavy dependence on 'oil and gas', Abu Dhabi's Vision 2030 calls for diversification in economic planning (IKED, 2010).

The rapid growth in international trade, foreign investments, new technologies and personal mobility has forced the organizations in Abu Dhabi to strategically transform and manage their own rapid growth (IKED, 2010). As a result, the government of Abu Dhabi has been paying close attention to investing in its semi-government organizations in order to diversify its economy and reduce its dependence on the oil and gas industry. The country's progress and the interest in the semi-government sector, coupled with globalization, falling oil prices, turmoil in the Middle East and the global financial crisis have shown an acute need to practice strategic management across the UAE in general (Elbanna & Fadol, 2016) and Abu Dhabi in particular.

At the beginning of the new millennium, little emphasis was put on strategic planning in UAE based organizations. As a result, strategic management processes, which up until 2008 were rarely and ineffectively invoked, failed to be applied where they were needed in order to strategize Abu Dhabi's public and semi-public organizations (Elbanna, 2013). Over time, however, public and private sector



organizations in the UAE began to adapt and implement strategic management processes, but it is difficult to claim that semi-government organizations also did this; the author is not aware of any relevant research on this sector in Abu Dhabi or even in the UAE as a whole compared with other contexts.

The Abu Dhabi's group of semi-government bodies includes approximately 200 organizations encompassing oil and gas, energy, investment, education, healthcare, tourism and many other fields (ADG, 2013). As discussed above, despite the importance of this group, the literature has said little or nothing pertinent to strategic management practices in the UAE's semi-government organizations in general or those of Abu Dhabi in particular. This is another vital contribution of the present study, making theoretical and practical contributions to the strategic management literature.

However, active functionality and participation from public, private and semi-government organizations are crucial for the realization of Abu Dhabi's Vision 2030, which envisages long-term planning to transform the Emirate's economy, reducing its reliance on oil production and increasing the focus on knowledge based industries (Arnold, 2013). In addition, the government aims to diversify the economy through increased contributions to the non-oil sector, including primarily tourism, aviation, manufacturing, the media, health care, petrochemicals, financial services and renewable energy, so these organizations can implement a developed economic strategy by 2030 (ADCED, 2008).

Vision 2030 demands transparent and accountable departments in public, private and semi-government bodies. This inevitably affects the government's planning and decision making ability, calling upon semi-government organizations in

particular to exemplify strategic planning through formularized, implementable and evaluative strategies for the sake of better performance.

Likewise, given the potential for growth in the semi-government sector of Abu Dhabi, this seems a good opportunity to study strategic management processes in order to understand how the semi-government sector formulates, implements and evaluates strategic plans (ADCED, 2008).

Hence, a study of Abu Dhabi's semi-government sector would inevitably add value to the existing literature and fill important gaps in the research on strategic management in the semi-government sector of Abu Dhabi.

#### **1.4 Research Objectives and Questions**

With the above discussion in mind, the following objectives of this study may be specified:

1. Evaluate the current stance of the strategic management practices in Abu Dhabi's semi-government sector.
2. Explore the relationship between strategy formulation, implementation and evaluation elements and organizational performance.
3. Identify whether environmental dynamism moderates the relationship of strategy formulation, implementation and evaluation elements to organizational performance.

To achieve the above objectives, the following research questions are addressed for analysis:

1. What is the nature of strategy formulation, implementation and evaluation in Abu Dhabi's semi-government sector?
2. What is the relationship of the strategy formulation, implementation, and evaluation elements to organizational performance?
3. Does environmental dynamism moderate the relationship of strategy formulation, implementation and evaluation to organizational performance?

It follows that addressing these research questions would fill a number of notable knowledge gaps in the literature that still exist, despite several significant steps that have already been taken towards developing a better understanding of the strategic management process.

1. As noted below in Part 1.5, the relationship between the strategic management process and organizational performance needs further investigation because much of the focus of the previous research has been on strategy formulation, with too little attention to its links with the other two components of the process; namely, implementation and evaluation and control, a line of research that has recently been emerging (e.g., Elbanna, 2013).
2. The moderating effect of environmental characteristics on the relationship between the full strategic management process (i.e., all its three elements) and organizational performance requires further study because, as a natural extension of the above point, much of the previous research examined the impact of environmental characteristics on strategy formulation, leaving

the issue of their impact on implementation and evaluation and control still open for investigation.

3. The current stance of the strategic plan formulation, implementation and evaluation elements in Abu Dhabi's semi-government sector is still not clear, since much of the focus of the previous research has been conducted in the private and, to a lesser extent, the public sectors. Furthermore, much of this research has been conducted in Western contexts. Only recently, a very few studies started to investigate strategic management in the semi-government organization context in the UAE (e.g., Elbanna, 2012; Fadol et al., 2015).

This research attempts to fill the above knowledge gaps by studying, via structural equation modeling, a sample of 182 semi-government organizations in the UAE and offering several theoretical and managerial implications, as outlined below.

### **1.5 Research Contributions**

The present study contributes to the current knowledge on strategic management in several ways.

1. As pointed out above, previous research paid most attention to the component of formulation and did not relate the three components of the strategic management process equally to organizational performance; nor did it consider all these three elements in one integrated model, apart from a few recent exceptions (Elbanna, 2016; Elbanna & Fadol, 2016; Elbanna et. al., 2015; Elbanna, 2013). The present research attempts to overcome this weakness by integrating the three elements of the strategic

management process, in a single framework and examining their impact on organizational performance, which may help to develop a more complete model of the strategic management process.

2. Most of the early research has investigated environmental characteristics with respect to strategy formulation. The present study takes these efforts one step further and investigates the impact of environmental characteristics (i.e., environmental dynamism) on the other two components of the strategic management process (i.e., implementation and evaluation and control) as well, which may further advance our understanding of organizational performance from a strategic management perspective.
3. Despite some recent research into strategic management processes in the public sector in the UAE (Elbanna, 2013; Elbanna et al., 2015), very little research has so far examined this process in semi-government organizations (e.g., Elbanna, 2012; Fadol et al., 2015). By examining the semi-government sector in Abu Dhabi, this study contributes to improving managerial practices in this sector, a less researched sector than either the private or public sectors, in the UAE in particular.
4. On a practical note, this study is timely for policy makers and executives of the semi-government sector in Abu Dhabi. They are at present working to divert the economy of this important emirate toward non-oil and sustainable industries and strategic management practices are at the heart of this process and among its main drivers.

This research also offers a number of implications for managers and policy makers in the UAE semi-governmental sector in general and that of Abu Dhabi in particular.

This study indicated that organizational performance is a function of strategic plan formulation. Therefore, organizations should pay close attention to the strategic planning process (i.e., choose the strategic planning tools that best fit their needs).

This study further indicated that the execution of strategic plans is also important for organizational performance. Therefore, our study calls for managers' attention to ensure that planned strategic decisions are effectively implemented.

This study found that strategy evaluation is positively related to organizational performance. This suggests that top managers must have a strong sense of accountability and effectively practice strategic control to achieve high performance on the part of their organizations.

This study also found that environmental dynamism affects the relationship between the strategic management process and organizational performance. This suggests that decision makers in organizations should pay enough attention to the environment in which their organizations are working and act accordingly.

Finally, our thesis is of special importance to the organizations operating in the Abu Dhabi context, in that it reports that strategic planning can help the Abu Dhabi semi-government organizations to plan effectively and strategically, and thereby to perform better.

## **1.6 Outline of the Thesis**

The plan and organization of chapters in this thesis are as follows:

### **Chapter 1: Introduction**

This chapter discusses the general outline of the thesis. Topics include theoretical background to the research, the context of the study, the research objectives and questions, and the contributions and outline of the thesis.

### **Chapter 2: Literature Review**

This chapter provides an overview of the theoretical foundations on which this research is based. It discusses the literature on strategic management, strategy formulation, strategy implementation and strategy evaluation. The literature search focuses on issues arising from the relationship between the three strategy processes and organizational performance and competitiveness. It is used to identify related constructs and gaps in the literature, which then leads to the formulation of a research model and research hypotheses.

### **Chapter 3: Methodology**

This chapter is about the research methods that were adopted in this study to collect data for testing the research hypotheses that were developed in Chapter 2. It therefore discusses in detail issues such as the research design, unit of analysis, measurement, sampling design, questionnaire design, data collection methods, and analytical procedures. To achieve the research purpose, the literature related to these issues was searched to obtain information on the scales appropriate for measuring the

constructs and the appropriate method for conducting quantitative research with significant validity and reliability.

#### **Chapter 4: Descriptive Statistics and Reliability Analysis**

This chapter presents the preliminary research findings. The descriptive analysis provides some qualitative insights with which to investigate, describe and discuss the data. It also focuses on the purification and computation processes of the measuring instruments.

#### **Chapter 5: Quantitative Analysis**

This chapter describes the procedures and findings of the factor analysis, means testing, and structural equation modelling. The results of the hypothesis testing were revealed.

#### **Chapter 6: Discussion**

This chapter discusses the research findings. It next highlights the theoretical contributions and the practical implications of this study. The chapter then draws attention to the study's limitations, before offering suggestions for future research. The chapter ends with a conclusion to the thesis as a whole.

#### **Summary**

This chapter presents an overview of the study: namely, the theoretical background to the research, its research objectives and questions, and the significance of the present study. In addition, this chapter also presents an outline of the study. The



following chapter reviews the literature in order to identify the research constructs and their relationships. The literature review leads to the development of a conceptual framework and associated hypotheses.

## **Chapter 2: Literature Review and Hypotheses Testing**

### **2.1 Introduction**

This research aims to investigate how strategy formulation, strategy implementation and strategy evaluation influence organizational performance and the impact of the latter on organizational competitiveness. To this end, this chapter provides a review of the relevant literature on these concepts and develops the study's hypotheses. The chapter begins by a brief description of the evolution of strategic management. Then it briefly discusses the concepts of organizational performance and competitiveness, provides an in-depth review of the literature on the three elements of strategic management (formulation, implementation and evaluation), and explains the relationships of these three concepts with organizational performance and that of the latter with organizational competitiveness. The concept of environmental dynamism is also discussed to explore its moderating effects on the above relationships. Finally, the above reviews are synthesized to develop a conceptual framework that describes the hypotheses put forward, which are presented and discussed at the end of the chapter.

### **2.2 Strategic Management**

The definition of strategic management derives from the basic meaning of 'strategy'. The works of Chandler (1962) and Ansoff (1965) provided the first definitions of strategy and the foundation for the field. Chandler (1962, p. 16), for example, defined strategy as "the determination of the basic long-term goals and objectives of an enterprise, and the adoption of courses of action and the allocation of resources necessary for carrying out these goals". Andrew (1987) added the ideas of

distinct competence, company mission and business definition and popularized the SWOT analysis, which was usually credited to the works of George Albert Smith Jr., C. Roland Christensen and Kenneth Andrews at the Harvard Business School in the 1950s (Ghazinoory, Abdi, & Azadegan-Mehr, 2011). Andrew (1987) argued that by using SWOT analysis, a firm can understand the uncertain environment that presents threats and opportunities to which it has to adapt its strengths and weaknesses. Johnson, Scholes, and Whittington (2008) defined 'strategy' as complex adaptations of processes, plans and structures that serve or appear to serve an important function in achieving evolutionary success.

The above brief description suggests that one of the fundamental questions that strategic management attempts to answer is, how do firms achieve sustainable competitive advantage (Herrmann, 2005). In this quest, many concepts, theories and methodological approaches have been developed. These theories and concepts mainly examine the external and internal conditions for the firm and develop ideas and methodological advances that try to predict managerial responses to changes in these conditions (Herrmann, 2005), ultimately causing strategic management to emerge as a field of study.

### **2.2.1 Evolution of Strategic Management**

The evolution of the strategic management field has been impressive. Since its earliest days, strategic management has experienced fluctuating popularity and effectiveness. It first appeared in the 1950s and was very popular between the mid-1960s and the mid-1970s. Then at the end of the 1970s and during the 1980s, strategic management lost its popularity because many planning models did not perform very

well (Elbanna, 2013) and strategic management was criticized on the grounds that it is based upon theoretical principles and not on the realities of management (Berry, 1998). It has also been argued that strategic management (strategic planning) is rigid and limited to the work of top managers or CEOs (Aldehayyat & Anchor, 2008). As a response, these and similar criticisms were incorporated into strategic management. Consequently, during the 1990s, strategic management restored some of its reputation (Glaister & Falshaw, 1999). From its 'humble' beginnings as the limited content of a capstone general management course in the business school curriculum, strategic management is now a well-established field and is a widely used practice in various organizations (Hoskisson, Hitt, Wan, & Yiu, 1999).

In strategic management, the original definition of strategy initiated an era of ferment characterized by a focus on the environment (Herrmann, 2005). The attention to the environment of firms resulted in the development of a widely accepted model for analysing industry. Then a new era of ferment was created derived from the resource-based view that affirms that the main sources of sustainable competitive advantages reside in the development and use of valuable organizational resources (Herrmann, 2005). These two perspectives, which are briefly described below, have played a significant role in shaping strategy research, along with such other theoretical perspectives as agency theory, institutional theory, and transaction costs theory (Guerras-Martín, Madhok, & Montoro-Sánchez, 2013).

### 2.2.1.1 Michael Porter's Five Forces

Michael Porter (1980) used the ideas of industrial organizational economics to build a framework for industry analysis. He provided the first 'dominant design' in strategic management with his classic book *Competitive Strategy* (Barney, 2001).

Porter's Five Forces framework clearly specifies the various aspects of an industry structure; in this way it provides a useful analytic tool to assess an industry's attractiveness and facilitates competitor analysis. The "Five Forces" model combines an analysis of competitive actions (or rivalry) between firms, with the horizontal threat of new entrants and substitutes and the vertical power of buyers and suppliers to determine an industry's attractiveness and identify possible sources of profitability (Porter, 2008). More particularly, Porter argues that a firm's performance is primarily a function of the industry environment in which it competes. Firm performance is determined by industry attractiveness, which depends on five essential forces: threat of entry, intensity of rivalry among existing competitors, pressure from substitute products, the bargaining power of buyers, and the bargaining power of suppliers. Based on multiple industry analyses, Porter also classified four stages in an industry's life cycle, namely, introduction, growth, maturity and decline, in which the industrial forces combine in predictable ways that make certain generic strategies more or less advantageous (Grant, 2008).

Porter's Five Forces concept built a framework of strategic management and industry analysis. However, this framework focuses on the market structure to explain organizational performance and ignores the firm itself (Hoskisson et al., 1999). Thus, the resource-based view of the firm has been readily adopted as a useful complement that shifts the focus on to building organizations' internal capabilities to leverage

unique configurations of resources (Grant, 2008). By focusing internally, organizations are able to rely on their unique and rare resources to achieve competitive advantage and high levels of organizational performance.

### **2.2.1.2 The Resource-based View of the Firm**

After the definition of strategy in the 1960s and the focus on the environment in the 1980s, scholars searched inside the firm for a new paradigm. The Resource Based-View (RIB) of the firm can be seen as a discontinuity that started a new era of ferment in strategic management. The RIB focuses on market imperfections and highlights firms' varying degrees of specialization. This view complements the industry analysis framework, which considers that profitability is the source of the characteristics of the industry, and indicates that the type, magnitude and nature of a firm's resources and capabilities are important determinants of profitability (Amit & Schoemaker, 1993).

The word 'resource' refers to something that an organization can draw on to accomplish its goals. It may refer to tangible assets (a prime location), intangible assets (a strong brand or knowledge) or capabilities (a superefficient manufacturing process) that firms may use to conceive of and implement their strategies (Barney, 2001). From this angle, the RBV of the firm suggests that valuable, rare, imperfectly imitable, and non-substitutable resources can lead to sustainable competitive advantage and superior performance (Barney, 1991). Such strategically valuable resources have five characteristics: (1) they are difficult to copy, (2) they depreciate slowly, (3) the company – not employees, suppliers, or customers – controls their value, (4) they

cannot be easily replaced, (5) they are superior to similar resources that competitors own (Collis & Montgomery, 2008).

Teece, Pisano, and Shuen (1997) introduced the concept of dynamic capabilities, which is considered an extension of the RBV. Dynamic capabilities can “*continuously create, extend, upgrade, protect, and keep relevant the enterprise’s unique asset base*” in a changing environment (Teece, 2007, p. 1319). They are particularly relevant in highly turbulent markets (Eisenhardt & Martin, 2000). Dynamic capabilities are second-level capabilities; they are the capabilities that can be used to modify other resources and first-level capabilities, thus creating value for firms. Dynamic capabilities theory is used to explain why some firms can perform better than others in dynamic environments.

The two perspectives briefly discussed above played an important role in the development of the field of strategic management, which is usually depicted as a process. The following section provides a definition of the strategic management process.

### **2.2.2 Strategic Management Process**

Researchers use the terms strategic management and strategic planning synonymously. However, the term strategic management is more often used in academia, whereas the latter is often used in the business world (David, 2011; Elbanna, 2013). Strategic management is a more inclusive concept than strategic planning, because it includes not only strategic planning, but also the implementation and the evaluation of strategic plans (Bryson, 2011; Elbanna, 2013).

In the current literature, normative models of strategic management have depicted strategic management as a process that includes three key stages or elements: strategy formulation, strategy implementation, and strategy evaluation and control (Preble, 1992).

*Strategy formulation*, which is also referred to in this study as strategic plan formulation, refers to establishing the vision, mission, and long-term objectives and generating and identifying the strategic options to strengthen the competitive position of the company. It is related to determining an organization's future direction (Mintzberg, 1973).

*Strategy implementation*, which is also referred to as strategic plan implementation in this study, is concerned primarily with the modification of organizational structures and processes to ensure that the planned results are obtained (Galbraith & Kazanjian, 1986; Lorange & Murphy, 1984). It requires the building of an organization capable of performing a successful strategy, setting budgets, developing administrative support systems, and building performance reward systems and an organizational culture model to match the strategy (Elbanna, 2013).

*Strategy evaluation and control*, which is also referred to as strategic plan evaluation in this study, aims to highlight and generate solutions to correct deviations from the outcomes that the implemented strategies are expected to generate. It involves assessing the overall effects of the implemented strategy on the organization and evaluating the performance to determine whether plans, strategies, and objectives are achieved. The feedback from this assessment is used to solve problems or take corrective actions (Preble, 1992; Schendel & Hofer, 1979).



Despite many recent research efforts on the above three elements of strategic management (Greenley, Hooley, Broderick, & Rudd, 2004; Håkonsson, Burton, Obel, & Lauridsen, 2012), much of the existing research has been carried out in Western countries and little research has been empirically conducted on strategic management in the Arab region (Elbanna & Fadol, 2016).

This study contributes to filling this gap in the literature by investigating the relationships of the three components of strategic management (i.e., strategy formulation, strategy implementation and strategy evaluation) to the performance of semi-government organizations in the United Arab Emirates (UAE) and the impact of the latter on organizational competitiveness. The following section provides a brief discussion of the concepts of organizational performance and competitiveness followed by an in-depth review of the literature on the three components of the strategic management process.

## **2.3 Organizational Performance**

### **2.3.1 The Concept of Organizational Performance**

In this study, organizational performance, which is hypothesized to influence organizational competitiveness, is considered from both financial and non-financial perspectives. The performance concept and organizational effectiveness, and their importance have been widely recognized by several scholars (Yamin, Gunasekaran, & Mavondo, 1999). While performance refers to how well an organization achieves its market-oriented goals and its financial goals (Yamin et al., 1999), competitiveness is the extent to which an organization is able to create a defensible position over its competitors (McGinnis & Vallopra, 1999).

Previous researchers have discussed both performance and competitiveness and tried to understand their relationship and how organizational practices influence them (Li, Ragu-Nathan, Ragu-Nathan, & Rao, 2006; Yamin et al., 1999). This is also the approach adopted in this study. Below is a brief review of organizational performance and competitiveness. In particular, the researcher suggests that creating a defensible position over time depends on a firm's (financial and non-financial) performance.

### **2.3.2 Organizational Performance**

Organizational performance has been a pervasive issue in strategy research (Combs, Crook, & Shook, 2005; Hamann, Schiemann, Bellora, & Guenther, 2013). While it is beyond the purpose of the present study to provide a comprehensive review of the studies on organizational performance, two issues that are particularly relevant to the present study deserve brief coverage: how to measure performance and how to obtain performance data.

Regarding the former issue, a variety of performance measures exist, which can be broadly classified as either financial or nonfinancial measures (Phillips & Moutinho, 2000). Financial measures are the measures that rely on accounting-based information and are expressed in monetary units. Among the financial measures are profit, return on investment, asset turnover, return on capital employed (Baker, Black, & Hart, 1988), and inventory turnover (Frazier & Howell, 1983). Nonfinancial measures, for their part, refer to the measures that do not rely on accounting-based information and are not expressed in monetary terms. They may include innovation (Zuriekat, Salameh, & Alrawashdeh, 2011), employee satisfaction (Zuriekat et al.,

2011), customer satisfaction (Vorhies & Morgan, 2005), corporate social responsibility (Hart & Banbury, 1994), operational efficiency (Child, 1972), market share, sales growth (Vorhies & Morgan, 2005), market standing (Saunders & Wong, 1985) and quality of products or services provided (Zuriekat et al. (2011, p. 165).

Regarding the latter issue, performance can be measured by objective measures, which do not rely on the interpretation of the respondents, or subjective measures, which are affected by the respondents' perceptions (Ailawadi, Dant, & Grewal, 2004; Chenhall, Kallunki, & Silvola, 2011). In this study, both financial and nonfinancial measures are used to capture organizational performance in its different aspects and to depict it more comprehensively (Jusoh & Parnell, 2008). This approach has been successfully used in the UAE (Fadol, Barhem, Elbanna, Adcroft, & Bruce, 2015), which is the study setting of the present research.

Financial and nonfinancial performance data are collected from the respondents subjectively. This study acknowledges that this approach of using subjective performance measure has its drawbacks. One notable potential problem is that individuals consistently overestimate the level of performance in the organization (Hastie & Dawes, 2003; Meier & O'Toole, 2013). This overestimation is not related to more difficult tasks or the availability of resources. This self-assessment of performance may also lead to common source bias (Meier & O'Toole, 2013).

Thus, the benefits of using managers' self-assessments of performance need to be weighed against the costs (Meier & O'Toole, 2013). One notable benefit of using perceptual performance measures is that it is easier to collect subjective assessments because most organizations are reluctant to provide "hard" or objective performance data (Fiorito & LaForge, 1986). Another benefit of using subjective measures is that it

helps to avoid the problems associated with using objective performance data. For example, there are no objective financial data publicly available in the UAE, making it necessary to subjectively evaluate performance. Similarly, when the study covers diverse industries (Miles, Covin, & Heeley, 2000), as is the case in this research, directly comparing the objective (financial) data of companies will be misleading (Miles et al., 2000), making it necessary to use perceptual performance measures. Furthermore, past research showed that objective measures of performance are highly correlated with subjective measures (Guthrie, 2001; Wall, Michie, Patterson, & Wood, 2004). For example, in the study of Guthrie (2001), the sample of which comprised senior management respondents from 164 New Zealand companies, subjective performance (productivity) was operationalized as reported sales per employee and was calculated from the responses to two questionnaire items asking for the most recent estimates of annual sales and total number of employees. The directly corresponding objective financial data (i.e., sales per employee) were obtained for a sub-sample of 65 companies. The product-moment correlations between the subjective performance and objective financial data were significantly correlated. The second study is that described by Wall et al. (2004). The sample comprised 80 U.K. manufacturing companies employing from 60 to 1,150 employees. Wall et al. (2004) examined the relationship between the subjective and objective measures of performance. Subjective performance was operationalized as labour productivity, and financial performance. The objective performance was measured using financial data extracted from an EXTEL database. The product-moment correlations between the two kinds of measure were statistically significant (Wall et al., 2004).

For these reasons and following earlier studies in UAE context (e.g., Elbanna, 2012; Fadol et al., 2015), this study chose subjective financial and nonfinancial

performance measures over objective measures and argues that each of the three elements of the strategic management process (i.e., strategy formulation, strategy implementation, and strategy evaluation and control) is related to organizational performance, which in turn is related to organizational competitiveness. The study further suggests that environmental dynamism moderates the relationship between the three components of the strategic management process and organizational performance. The following parts discuss these fundamental suggestions of this study.

#### **2.4 Organizational Competitiveness**

The concept of competitiveness can be looked at from three different levels: country, industry, and firm level (Ajitabh & Momaya, 2004). It also involves different disciplines or perspectives, such as comparative advantage, the price competitiveness perspective, the strategy and management perspective, and the historical and sociocultural perspectives (Waheeduzzaman & Ryans, 1996). This indicates that there is no universal and exact definition for the concept of competitiveness.

Ruekert, Walker Jr, and Roering (1985, p. 20) offers a view of competitiveness which is also adopted by the current study, that portrays competitiveness in terms of the ability of organization to adapt to changes in competitors' market strategies, to adapt its products/services to changes in customers' needs, to react rapidly to threats in the market, and to explore market opportunities. Rainer and Kazem (1994) propose that competitiveness can be viewed in terms of its three components: i) customer value (i.e., the ability to persuade customers to choose one firm's offerings over alternatives), ii) shareholder value (i.e., the ability to improve shareholder's profit potential in relation to the competitors) and iii) the ability to act and react within the competitive

environment, which is affected by the financial strength and the potential of people and technology to implement the necessary strategic changes. According to Rainer and Kazem (1994, p. 58), competitiveness can be sustained only if an appropriate balance is maintained between these factors, which sometimes conflict.

Some researchers use 'competitiveness' and 'competitive capability' interchangeably (e.g. Tracey, Vonderembse, & Lim, 1999). Some define firm level competitiveness as the ability of a firm to design, produce and/or market products superior to those offered by competitors, considering both price and non-price qualities (D'Cruz & Rugman, 1992). Corbett, Van Wassenhove, and de Constance (1993) also view competitiveness as a multidimensional concept and suggest that a firm's competitiveness has price, place, and product dimensions. Similarly, Buckley, Pass, and Prescott (1988) suggest the application of a threefold measure of competitiveness, including competitive performance, competitive potential, and management process. Adopting the model of Buckley et al. (1988), Man, Lau, and Chan (2002) propose that competitiveness has four dimensions, namely entrepreneurial competencies, competitive scope, organizational capabilities, and firm performance. The competitive scope and organizational capabilities represent the constructs of external environmental factors and internal firm factors, respectively, and together they make up the potential dimension of competitiveness. The construct of firm performance addresses the performance dimension (Man et al., 2002, p. 133). Purba and Diane (2005) consider variables such as improved efficiency, quality improvement, productivity improvement and cost savings to investigate competitiveness.

This study argues that organizational performance is different from organizational competitiveness. Organizational performance is an organizational

outcome which can be either financial or nonfinancial. However, organizational competitiveness is a type of organizational ability which allows organizations to adapt to changes in competitors' market strategies, to adapt its products/services to changes in customers' needs, to react rapidly to threats in the market, and to explore market opportunities (Ruekert, Walker Jr, and Roering, 1985, p. 20).

Scholars have investigated the factors that can improve organizational competitiveness. Some authors have viewed competitiveness with the competency approach (Ajitabh & Momaya, 2004). They suggest that internal factors such as firm strategy, structure, competencies, capacity to innovate, and other tangible and intangible resources contribute to firms' competitive success (Bartlett & Ghoshal, 1989; Hamel, Doz, & Prahalad, 1989; Hamel & Prahalad, 1990). This view is particularly associated with the resource-based view of competitiveness (Barney, 1991; Barney, 2001; Peteraf, 1993), which suggests that the ability to develop and renew capabilities far more effectively than competitors can help in achieving competitiveness.

Past research has used competitiveness as a dependent variable. Tracey et al. (1999), for example, studied the impact of advanced manufacturing technology and manufacturing managers' participation in strategy formulation on a firm's competitive capabilities. Their results indicate that there is a positive relationship between advanced manufacturing technologies and competitiveness and between manufacturing managers' participation in strategy formulation and competitiveness. The results also confirm the notion that firms with high levels of competitiveness achieve high levels of customer satisfaction and market performance.

Similarly, Lu, Shen, and Yam (2008) identify the major factors for a successful competitive strategy as an explicitly defined competitive strategy, matching strategy to a company's situation, and effective strategy implementation. These factors enable managers to focus on the key aspects when competitive strategies are to be formulated and implemented in the interests of competitiveness. In addition, Pryor, Anderson, Toombs, and Humphreys (2007) propose that implementation expertise and capability are equally important entities for creating and maintaining a sustainable competitive advantage. Hauc and Kovač (2000) also indicate that prompt and effective strategy implementation is becoming one of the most important competitive moves. When this is combined with a correct and quick strategy formulation, better competitiveness is ensured.

Our review so far has focused on organizational performance and competitiveness. The following parts will establish the relevance of organizational performance, first, to the three elements of strategic management process (formulation, implementation, and evaluation) and then to organizational competitiveness. Further research is needed about the way in which strategy formulation, implementation and evaluation influence organizational competitiveness and performance in semi-government (public) organizations in UAE; this would be timely, because the findings of such an attempt could help the managers of these organizations make better decisions and use public (and organizational) resources more effectively.

The following section reviews the literature on the three elements of strategic management process (i.e., strategy formulation, strategy implementation and strategy evaluation) as they relate to the hypotheses to be tested in this study.



## **2.5 Strategic Plan Formulation**

### **2.5.1 Concept of Strategic Plan Formulation**

Strategy formulation is a dynamic process through which organizations develop their strategies (Kraus, Harms, & Schwarz, 2006). It provides firms with a substantial basis for making key decisions, solving problems, improving performance and ensuring effectiveness.

Researchers use the terms strategy formulation and strategic planning as synonyms (Poister, Edwards, Pasha, & Edwards, 2013). Strategic planning is not a new concept. Almost four decades ago, Ackoff (1970) wrote about corporate planning. Since then, researchers have proposed many definitions of strategic planning, but none that is commonly accepted and universal definition (Brews & Purohit, 2007). Goldsmith (1995) views strategic planning as the process of allocating scarce resources in an environment of competing demands to strengthen an organization's financial viability. Bryson (2003) defines it as "a disciplined effort to produce fundamental decisions and actions that shape and guide what an organization (or other entity) is, what it does, and why it does it" (p. 6).

Similarly, Hax and Majluf (1990) define strategic planning as the process by which organizations determine and establish long-term directions and formulate and implement strategies to accomplish long-term objectives, taking into account relevant internal and external environmental variables. This definition, which is adopted by the present research, indicates that the planning process involves a series of organizational activities that begin with the definition of organizational mission, the development of strategic objectives and crafting of strategies, and ends with the development of

detailed action plans to ensure that the strategies are implemented to achieve organizational objectives while taking organizational environment into consideration. In this process, organizations need to clarify competitive threats and opportunities (Song, Im, Bij, & Song, 2011) and evaluate organizational strengths and weaknesses.

### **2.5.2 Process and Content of Strategic Plan Formulation**

Strategy formulation can be understood from two perspectives. The first perspective gives prominence to the “process” of strategy formulation or strategic planning, which is concerned with “how” a strategic plan is developed, whereas the second perspective notes rather the “content” of strategy formulation, which is concerned with “what” the strategic plan contains (Elbanna, 2006). These two perspectives are discussed below, with less emphasis on the latter, as beyond the scope of this study.

#### **2.5.2.1 Strategy Process**

Strategy process refers to how certain elements crucial for an organization’s sustenance are identified and established. These elements include organizational mission, stakeholders’ needs, organizational mandates and strengths, and the weaknesses, threats and opportunities found in the organizational environment. Other key elements of strategic planning process are strategic agendas, action plans and the assessment of proposed strategies (Poister & Streib, 2005).

Several factors have been argued to have important roles in strategic planning process. Elbanna (2013), for example, argues that the attitudes of managers to strategic planning, and the expertise of people involved in the planning process and use of

strategic advisors are important determinants of the effectiveness of strategic planning. He finds in his study of 67 public organizations in the UAE that the former two factors explained 41 percent of variation in the perceived strategic planning outcome.

Researchers also discuss the role of intuition in the strategic decision-making (i.e., strategy formulation) process (Elbanna, Child, & Dayan, 2013; Glöckner & Witteman, 2010). Elbanna et al. (2013) define intuition as “a mental process based on a ‘gut feeling,’ as opposed to explicit, systematic analysis, which yields an intuitive insight or judgment that is used as a basis for decision making.” (p. 150). Miller and Ireland (2005) claim that intuition is an effective approach to strategic decision-making, because managers usually do not have complete, accurate and timely information when making strategy decisions. In a study of Egyptian manufacturing firms, Elbanna et al. (2013) find that the strategic decision-making process will rely more on intuition when it is motivated by an opportunity.

Other researchers examined strategy formulation in terms of the participation (involvement) of organizational members in the formulation process (Lavarda, Canet-Giner, & Peris-Bonet, 2010; Pappas & Wooldridge, 2007). Due to the growing dynamism of the environment, organizational strategy formation has evolved from a top-down process to a more bottom-up one or towards a middle-up-down perspective (Lavarda et al., 2010). In the top-down decision-making model, top managers make the decision. The emphasis is put on explicit knowledge (the standards and rules that define the tasks) (Nonaka, 1994). Conversely, in the bottom-up decision-making model, employees act as entrepreneurs and leaders who create or sponsor various projects and information. Recently, researchers have recommended a strategy formation process that is able to combine the two extreme models and suggested that

employees at all levels can help in the process of forming strategies (Pappas & Wooldridge, 2007). Thus, a middle-up-down decision-making model is proposed. In this model, management is composed of middle managers acting as coordinators and facilitators of the process and catalysts encouraging the creation of organizational knowledge, focusing on both explicit and tacit knowledge (experience) (Lavarda et al., 2010). Middle management is the key level where the success of a middle-up-down strategy formation process lies. Middle managers contribute to the strategy process and they use brokerage relations to diffuse information across the various hierarchical levels of organizational managers (Shi, Markoczy, & Dess, 2009). They have the necessary abilities to participate in the decision-making processes and, as a result, they are more involved in the strategic process. They are even able to change organization directions by interposing their practical organizational perspectives (Lavarda et al., 2010).

Other researchers have pointed to the importance of having a systematic approach for developing strategic plans. More specifically, during the formulation of strategic plans, a solution-based logical approach can transform the thinking process if three fundamental steps are taken (Bryson, Crosby, & Bryson, 2009). The first step involves defining potential solutions from various stakeholders while the second step involves evaluating potential solutions through debate and scientific methods. The final step is to select the best solution, either by negotiation or by compromise (Bryson et al., 2009). Interaction among the strategy formulators or participants during these three steps ultimately formulates an idea that is termed a “strategy”.

Still other researchers argue that the degree to which participants are leveraged in decision-making, referred to as its ‘formality’, also plays an important role in

strategy formulation (Pearce & Robinson, 2008). While the ‘interaction’ is about the involvement of the participants in strategy formulation, ‘formality’ is about the conflict-resolution capacity and goal-orientation of the participants. The formality of strategic planning or formal strategic planning process refers to a formal process that focuses on defining, determining and implementing the specific objectives or strategic initiatives of the firm (Armstrong, 1982; Jarzabkowski & Balogun, 2009). It calls for an explicit procedure to determine specific, long-range objectives, generate alternative strategies, strict implementation and a system for monitoring results (Elbanna, Andrews & Pollanen, 2016).

Researchers provide a better understanding of the formality of planning process through describing strategic ends (i.e., objectives set forth in a formal strategic plan) and means (i.e., implementation plans set forth in a formal strategic plan) (Song et al., 2011). Organizations with very specific ends will be aware of many precisely quantified, formally documented, time-limited ends, ranging from a statement of firm mission to statements of specific market share (Brews & Hunt, 1999). Very specific means will be reflected in exact plans and/or programs for implementation, which describe in detail the actions and steps required for implementation and are formally documented and distributed within the firm (Dibrell, Craig, & Neubaum, 2014).

A carefully designed, formal strategic plan provides details and tactics that ensure the successful implementation of the strategy, which in turn enhances firm performance (Cooper & Kleinschmidt, 1986; Eisenhardt, 1989). In addition, formal strategic planning significantly enhances the quality, speed, and productivity of new product development (Clark & Fujimoto, 1991; Song et al., 2011).

However, many researchers criticize formal strategic planning for being rigid. Mintzberg (2000), for example, suggests that the assumptions of formal strategic planning, which are the superiority of formulation, separation of thought from action, quantitative analysis, and environmental forecasts, can lead to stagnant and useless strategies (Mintzberg, 2000). Mintzberg (2000) further argues that “the rationality assumed in strategic planning can be irrational when judged against the needs of strategy making” (Mintzberg, 2000, p. 221) and suggests that strategy formulation needs creativity, tacit knowledge, hands-on learning, pattern recognition, and, occasionally, radical departures from previous forms (Mintzberg, 1987). Consequently, more natural processes, such as intuition and adaptive learning, are just as or more successful at developing strategies (Mintzberg, 2000).

These shortcomings of formal planning are also recognized by other researchers. For example, Dibrell et al. (2014) argue that the formal strategic planning process creates some inflexibility and rigidity, thus making it hard to adapt to changes in the external environment, in particular when managers become strictly bound by their strategic plans (Mintzberg, 2000). Therefore, business leaders are increasingly urging firms to alter their strategic plans to match the changing external environment (Grant, 2003; Wiltbank, Dew, Read, & Sarasvathy, 2006). Additionally, in the study of Honig and Karlsson (2004), formal strategic planning is found to be negatively related to financial performance. The authors argue that writing formal business plans to conform to institutionalized rules and to mimic the behavior of others does not positively contribute to performance (Honig & Karlsson, 2004).

These and similar arguments raising the shortcomings of formality in planning are discussed through distinguishing deliberate and emergent strategic planning.

Mintzberg, Ahlstrand, and Lampel (1998) distinguish strategies as either deliberate or emergent. Deliberate strategies which suggest high levels of formality are defined as “intentions rebased” from strategies that are formulated in advance, whereas an emergent approach produces evolving strategic patterns “despite or in the absence of intentions” (Mintzberg & Waters, 1985, p. 161). While some researchers advocate a formal, systematic, rational, strategic planning process, others support an emergent process (Mintzberg & Waters, 1985). Stonehouse and Pemberton (2002), for example, argue that heavily structured planning (formal planning) is clearly inappropriate in times of rapid and turbulent change, while an emergent approach allows firms to be flexible when taking advantage of new opportunities in a changing environment (Goold & Quinn, 1990).

An emergent approach (Mintzberg, 2003), which is better suited to a dynamic and hyper-competitive environment, does not imply a complete absence of strategic planning. Mintzberg (2003) suggests that strategy is a combination of deliberate plans and emergent adjustments over time. Similarly, other researchers suggest that the debate between deliberate and emergent strategic planning approaches has been based upon a misconception of the way in which strategic planning works in practice. Grant (2003) finds that the strategic planning systems of the international oil majors could be described as processes of planned emergence. The primary direction of planning is bottom-up and lets business managers wield substantial autonomy and flexibility in strategy making. At the same time, the structure of the planning systems allows corporate management to establish constraints and guidelines in the form of vision and mission statements. Bodwell and Chermack (2010) suggest that organizations should integrate deliberate and emergent strategy. Harrington, Lemak, Reed, and Kendall (2004) argue that strategic planning should be treated as a continuum in order to better

tap into the idea that both approaches can be present in the organization. Andersen and Kragh (2012) confirm that the two strategy making modes are complementary elements of the strategy formation process and enhance organizational performance in particular for organizations with highly active international business operations against the turbulence of global markets.

Apart from the deliberate vs. emergent nature of strategic plans, strategic planning tools have also been a topic of research on strategy processes. Research suggests that various tools, such as a SWOT analysis, PESTEL analysis, stakeholder analysis, balanced scorecard, etc. can be used in to develop strategic plans (e.g., to formulate strategies) (Elbanna, 2013). Researchers have investigated the use of strategic planning tools and techniques in different countries. For example, Ghamdi (2005) studied Saudi Arabian organizations and found the mostly frequently used tool is an analysis of critical success factors. Aldehayyat and Anchor (2008) investigate the use of strategic planning tools and techniques in Jordanian companies. They find that the most often used techniques by Jordanian companies are financial analysis (of their own businesses), PEST or STEP analysis, Porter's five-forces analysis and the analysis of key success factors. Elbanna (2013) finds that other factors, such as the need to improve organizational performance, not the ease of use of the planning tools, determine the extent to which the planning tools are employed. Researchers also aimed to identify strategy formulation tools that are associated with enhanced performance. For example, the use of the balanced scorecard (Kaplan, 2001; Norton & Kaplan, 1992) has been argued to lead to better results (Cooper & Ezzamel, 2013) and to positively affect overall performance (Braam & Nijssen, 2004; Hoque & James, 2000).



Intensity is also an important part of strategic planning. Firms which make strategic plans with intensity can better understand their environment, which in turn results in improved organizational performance (Miller, Burke, & Glick, 1998). Intensity is also considered to positively influence performance (Chavunduka, Chimunhu, & Sifile, 2015).

To sum up, as a result of the arguments pointing to the shortcomings of the rigid formalization of formal strategic planning, strategic planning in practice has become over time less rigid and to include enough flexibility to still allow firms to have detailed plans. This has meant, for example, less emphasis on fully-elaborated processes and systems that will allow strategic plans to be adapted to a changing environment, and more focus on the use of multiple and complementary analytical tools that allow firms to generate as much information as possible (i.e., to engage in intensive strategic planning), and involve managers from different hierarchical levels in the organization, including line managers, together with more attention to the organizational culture that will increase the chance of implementation (Bonn & Christodoulou, 1996). The present study focuses on asking whether two particular aspects of strategy process (i.e., engaging in strategic planning practice, which is captured by the use of planning tools, and the extent or intensity of the strategic planning) influence firm strategy.

#### **2.5.2.2 Strategy Content**

Given the complexities faced by organizations, strategy process should also be understood from a 'content' point of view (Andrews, Boyne, Law, & Walker, 2011). Identifying the appropriate content for a strategy is necessary, since it equips

organizations to formulate the right strategy and enables them to give their optimal performance (Boyne & Walker, 2004). Therefore, the content approach aims to identify what is, or what should be, the strategy leading to optimal organizational performance. This involves describing the effective competitive positioning of the organization and access to resources within the organization's environment (Chapman, 2005). Strategy is seen to follow a logical, linear process of strategy formulation, implementation and control. Strategy content research provides snapshots of ideal strategies, or optimal combinations of strategies for organizations in different settings. Strategic change is typically categorized as being either radical or incremental (Chapman, 2005).

Strategy content is the outcome of a strategy process and refers to a pattern of action through which organizations aim at their desired goals, modify current circumstances and realize latent opportunities (Boyne & Walker, 2004). It can be explained on the basis of strategic actions and strategic stance. Strategic actions refer to the specific actions that drive and materialize the strategic stance. The strategic actions that organizations may use to operationalize their stance concern actual changes in markets, services, revenues, and external and internal structure (Boyne & Walker, 2004). Some researchers discuss the benefits of undertaking strategic actions. For example, Bensebaa (2004) examines, for the period of 1999-2002, the strategic actions of Lastminute.com and Ebookers.com and finds that these companies build up their reputations by achieving a balance between the three types of action (i.e., symbolical, competitive and relational actions) and the frequency of their use. The result suggests that there is a system linking the properties of these strategic actions to the firm's reputation.

Strategic stance, however, refers to the organization's position and the way in which it interacts with its environment (Boyne & Walker, 2004). The position may be that of a prospector, defender or reactor (Miles, Snow, Meyer, & Coleman, 1978). In the prospector stance, organizations seek to expand budgets and pioneer the development of new products and services. In the defender stance, organizations take a conservative view of new product development. Last, in the reactor stance, organizations perceive frequent change and uncertainty in their organizational environment (Andrews et al., 2011).

The study of Andrews, Boyne, and Walker (2006) presents an empirical test of the proposition that strategy content is a key determinant of organizational performance in the public sector. The authors conceptualize strategy content in terms of these two dimensions: strategic stance (the extent to which an organization is a prospector, defender, or reactor) and strategic actions (the relative emphasis on changes in markets, services, revenues, external relationships, and internal characteristics). The results from a survey of 119 English local authorities show that organizational performance is positively associated with a prospector stance and negatively with a reactor stance, suggesting that strategy content matters (Andrews et al., 2006).

The two perspectives (i.e., the process and content perspectives) on strategy formulation together suggest that the type of business strategy, interaction between key decision makers/managers, expertise in strategic planning and strategic planning tools, among other variables, facilitate the formulation of a strategic plan (Aldehayyat & Anchor, 2008).

This research uses variables related to strategy formulation from the process perspective. More specifically, it uses the following variables: the practice of strategic planning (use of strategic planning tools) and the strategic planning intensity. Below is a review of these two dimensions of strategy formulation.

### **2.5.3 Dimensions of Strategic Plan Formulation**

#### **2.5.3.1 Practice of Strategic Planning**

Managers use a variety of tools and techniques to identify and deal with strategic decisions (Ramanujam et al., 1986). For example, Webster (1992) presents a set of 30 strategic planning tools and techniques. Lisiński and Šaruckij (2006) have classified 28 tools of strategic planning. However, not all these tools and techniques are commonly used. For example, Ghamdi (2005) finds that only 10% of the Saudi Arabian organizations surveyed were using tools and techniques regularly. The most regularly used tool was the analysis of critical success factors, followed by benchmarking, and then what-if analysis, while SWOT analysis, product life cycle, and stakeholder analysis were used only moderately. Gunn and Williams (2007) found in a recent study of organizations in the UK that three tools – SWOT, bench marking, and critical success factor analysis – were used more extensively than any other.

Aldehayyat and Anchor (2008) suggest that the tools and techniques most commonly identified in the literature are: SWOT analysis, Porter's five-forces analysis, value chain analysis, portfolio analysis (e.g. BCG: growth share), PEST analysis, etc. In Elbanna's (2010) study, the three most used strategic planning tools are pro forma financial statements, cost-benefit analyses, and SWOT analyses. The high use of pro forma financial statements and cost-benefit analysis may be due to the

widespread availability of the accounting and financial skills required to prepare these tools. The high use of these two tools may be a sign of short-term business planning rather than strategic planning (Elbanna, 2010).

Glaister and Falshaw (1999) suggest that the availability of the planning tools and the level of skills required to use them affect the type of tool/technique used in strategy analysis. Interestingly, Elbanna (2010) suggests that the ease of use and resources needed are not the main determinant of the amount of use of strategic planning tools. He also suggests that people working in the UAE are less reluctant to apply the tools of strategic planning.

Strategic planning tools and techniques provide many benefits to the strategy process. For example, they allow managers to change valuable data into forms suitable for decision-making and action (Fleisher & Bensoussan, 2003). By using these tools and techniques, managers are able to reduce the risk involved in making certain decisions, establish priorities in large complex companies, and easily evaluate the relative importance of different business portfolios. These tools and techniques are a valuable communication device, which managers can use to present complex issues (Frost, 2003).

On the basis of the current literature, this study examines whether using the following most commonly used tools to develop strategic plans in the UAE context (Elbanna, 2013) will have positive influence on firm performance: pro forma financial statements (e.g., cash flow, income statement and budget), cost- benefit analysis, benchmarking, gap analysis, balanced scorecard, value chain analysis, spreadsheet “what if analysis”, SWOT analysis, PEST (Political, Economic, Social and

Technological) analysis, portfolio analysis (e.g., Boston Consulting matrix or General Electric matrix) and Porter's five forces analysis.

### **2.5.3.2 Planning Intensity**

Planning intensity describes the amount of effort made in the process of planning. It is operationalized by the amount of information generated and the intensity of analysing and evaluating the information (Schäffer & Willauer, 2003).

Previous studies used different concepts to refer to the intensity of strategic planning. Whereas a few studies explicitly contain the actual term "intensity of strategic planning" (Schäffer & Willauer, 2003), some researchers employ other terms, such as "comprehensiveness of strategic planning" and "extensiveness of strategic planning" to denote the intensity of strategic planning (Falshaw, Glaister, & Tatoglu, 2006). Comprehensive decisions are also likely to involve relatively complete information and knowledge of environmental opportunities and threats before making decisions (Elbanna, 2012). The comprehensiveness of the plan content reflects the scope of coverage of different program and situational factors (Slotegraaf & Dickson, 2004). Firms with a comprehensive approach to strategic planning are likely to generate numerous alternatives for competitive advantage (Menon, Bharadwaj, Adidam, & Edison, 1999), to evaluate various alternatives and to discard those perceived as less valuable to the firm (Slotegraaf & Dickson, 2004).

Researchers also discuss the factors that influence the intensity with which managers engage in strategic planning. Akinyele and Fasogbon (2010) have conducted a study based on data collected from First Bank of Nigeria. The results of their study indicate that strategic planning intensity is determined by managerial factors (e.g.,

strategic planning expertise and beliefs about planning-performance relationships), environmental factors (e.g., complexity and change) and organizational factors (e.g., size and structural complexity). These relationships have also been suggested in several other studies (Robinson & Pearce, 1983; Robinson, Pearce, Vozikis, & Mescon, 1984).

Research shows many beneficial outcomes of intensity for decision success (Elbanna & Child, 2007), and organizational performance (Fredrickson & Mitchell, 1984; Miller et al., 1998). For example, Miller et al. (1998) claim that firms with strategic planning intensity can better understand their environment, which in turn results in improved organizational performance. With higher intensity, managers become more capable of and effective in judging the environment's potential effect on their organization, thereby ensuring effective decision making (Sniezek, 1992). Similarly, Schäffer and Willauer (2003) suggest that intensity of planning is a credible sign of the importance of the planning in a company because it can increase managers' attention to strategic planning and increase the probability that the planning contexts and the fundamental business model will be understood and internalized. Thus, the intensity of strategic planning has a positive impact on learning in strategic planning.

Some studies indicate that strategic planning intensity is positively related to organizational performance. For example, Hopkins and Hopkins (1997) use data from 112 banks to investigate the relationship between strategic planning intensity and financial performance. They find that the intensity with which banks engage in the strategic planning process has a direct, positive effect on banks' financial performance, and mediates the effects of managerial and organizational factors on banks' performance. The results also indicate a reciprocal relationship between strategic

planning intensity and performance. That is, strategic planning intensity causes better performance and better performance, in turn, causes greater strategic planning intensity. In addition, Chavunduka et al. (2015) use a case study to investigate the relationship between strategic planning intensity and performance amongst mining firms. The results suggest that strategic planning intensity positively influences organizational performance. The authors maintain that efforts and commitment by managerial employees to a firm's strategic planning process are necessary managerial ingredients to enhance the coherence and effectiveness of strategy and they are more likely to positively influence firm performance. Salmela, Lederer, and Reponen (2000) also suggest that in a turbulent environment, intensive (comprehensive) planning may be more successful than incremental planning.

#### **2.5.4 Strategic Plan Formulation and Organizational Performance**

Although there are many studies that seek to elucidate the relationship between strategic planning or strategy formulation and organizational performance, the results of this body of research are fragmented and no consensus has yet emerged (Falshaw et al., 2006). Previous research provides support for all possible relationships: a positive relationship (Andrews et al., 2011; Sarason & Tegarden, 2003); a negative relationship (Fredrickson & Mitchell, 1984); no relationship (Robinson & Pearce, 1983); and complex relationship (Fredrickson & Mitchell, 1984; Poister et al., 2013). However, it is usually accepted that the practice of strategic planning is beneficial for organizations (Sarason & Tegarden, 2003); and that, over time, the use of strategic tools (strategic planning) will enhance firm performance (Elbanna, 2008).



Poister et al. (2013) argue that goal-setting theory can be used to explain the linkage between strategic plan formulation and performance. Employees' behavior reflects conscious goals and intentions. Employees' efforts and; thus, performance will be influenced by the goals assigned to them (Fried & Slowik, 2004). Thus, strategy formulation may possibly drive firm performance, since by developing clear strategic plans, firms divert the energy and attention of their employees away from goal-irrelevant activities toward goal-relevant efforts, leading to superior performance. Similarly, Pindur (1992) suggests that strategy formulation serves to generate action on high-priority items by taking managers' attention away from day-to-day operations and forcing them to focus on the critical issues that firms are facing.

In addition, Niven (2005) asserts that one of the principal benefits of strategic planning is enhanced organizational performance, because a strategic focus ensures that the entire organization is focused on its overall goals. Similarly, strategic planning can enhance co-ordination, such as bringing together all the business unit strategies within an overall corporate strategy (Koufopoulos & Moorgan, 1994). Through formulating strategic plans, firms can identify and exploit future marketing opportunities, enhance internal communication, and improve firm performance (Aldehayyat & Anchor, 2008; Koufopoulos & Moorgan, 1994).

On similar lines, Poister (2010) establishes a clear relationship between strategic planning and organizational performance, claiming that organizations can achieve greater advantage if strategy better responds to the performance management process. Since multi-functionality is a current characteristic of many public and private organizations, strategic planning can ensure the effective functioning of the various departments and programs (Poister, 2010).

The above arguments suggest that strategy formulation positively affects organizational performance. The present author further suggests that, for this positive effect to occur, the two aspects of the formulation process reviewed earlier (i.e., intensity of strategy formulation practices and use of strategic planning tools), which represent both the process and content perspectives of strategy formulation, should be positively related to organizational performance. More specifically, it is argued that intensity and the use of planning tools are positively related to organizational performance. This argument is consistent with various findings. For example, Hopkins and Hopkins (1997) find that the intensity with which banks engage in the strategic planning process has a direct, positive effect on banks' financial performance. Similarly, Chavunduka et al. (2015) found strategic planning intensity amongst mining firms positively influences firm performance. Baker and Leidecker (2001) report that there is a close relationship in the California tomato processing industry between the use of strategic planning tools and firms' Return On Assets. In particular, three specific strategic management tools (a mission statement, long-term goals, and ongoing evaluation) are found to have a strong positive correlation with firm profitability. Similarly, in the UAE and another Arab country, strategic planning practice, measured by the use of strategic tools, is concluded to enhance strategic planning effectiveness (Elbanna, 2008).

Based on the above discussions and the literature review presented in Part 2.5.3.1 and Part 2.5.3.2, the following hypotheses are proposed:

H1: Practice of strategic planning (the use of strategic planning tools) is positively related to organizational performance.

H2: Intensity of strategic planning is positively related to organizational performance.

## **2.6 Strategic Plan Implementation**

### **2.6.1 Concept of Strategic Plan Implementation**

While strategy formulation is an intellectual activity, strategy implementation is an administrative activity (Ackerman, Rosenblum, & Uytendaele, 1977) and consists of decisions taken by the executors to bring about the strategic goals and objectives formulated during the planning process. It concerns the gap between formulation and performance and is therefore important for the development of organizations (Elbanna, 2013).

Some researchers argue that strategy implementation, rather than strategy formulation, is the key to superior organizational performance (Safdari Ranjbar, Akbarpour Shirazi, & Lashkar Blooki, 2014). However, others have acknowledged the interactive nature of strategy formulation and strategy implementation (Andrews, 1971) and argue that successful strategy formulation leads to the development of appropriate structures and systems and to a suitable allocation of resources to ensure successful implementation. The outcome of strategy formulation is of little use if this process does not take into account the resources required to implement the formulated strategies (Dess, 1987). Thus, successful executives should pay enough attention to both strategy formulation and strategy execution.

Researchers have defined strategy implementation from different perspectives. Some researchers view implementation as an act of control and monitoring (Hrebiniak

& Joyce, 1984). This treatment of implementation as synonymous with control is a common perspective in many business strategy texts. Other researchers focus on the processes involved and define strategy implementation as the communication, interpretation, adoption, and enactment of strategic plans (Crittenden & Crittenden, 2008; Noble & Mokwa, 1999). Still others consider implementation to be synonymous with the execution of the strategic plan (Floyd & Wooldridge, 1992). For example, Kotler and Turner (1979) define implementation as the process that turns plans into action assignments and ensures that such assignments are executed in a manner that accomplishes the plan's stated objectives. Similarly, strategy implementation is viewed as the "activities and actions required for executing plans" (Elbanna, 2013, p. 433). It measures how far the processes of implementing the strategic plan in organizations address all the major activities that are required to put the strategic plan into action (Elbanna, 2013).

In the present study, the researcher argues that the "control and monitoring" aspect of strategic management should be at the strategy evaluation stage, while strategy implementation is more about implementing initiatives and changes across an organization and aligning all aspects of organizations to the given strategies. Thus, this study adopts Elbanna's (2013) definition of implementation, given above.

Past research shows that implementation is a more difficult stage than the other two stages of strategic management (i.e., formulation and evaluation). For example, implementing a planned marketing strategy is widely seen as a problematic managerial task that consumes substantial resources of time and effort but often ends in failure (Thorpe & Morgan, 2007). In the same vein, there is much research work suggesting that firms face many obstacles in implementing strategies (Andrew Lihalo K, 2014;

Canhada & Rese, 2011; Nazemi, Asadi, & Asadi, 2015). Based on qualitative data collected from the Mashhad electric energy distribution company in Iran, Nazemi et al. (2015) find eight distinct groups of barriers, namely, cultural, structural, managerial, environmental, human resource management, and lack of effective performance measures, insufficient resources and inadequate strategy formulation.

Similarly, Canhada and Rese (2011) discuss various barriers to strategy using models that are inconsistent with the organization's experience. Schaap (2012), for example, using the Northern Nevada plumbing industry as his sample, finds that strategic consensus plays an important role in the strategy implementation process. The author's findings also indicate that frequent communication up and down the organizational structure enhances strategic consensus through the fostering of shared attitudes and values. Senior-level leaders who have been trained in strategic planning and implementation are more likely to meet the performance targets than are those without training in the field. Based on the results, the study concludes that, in order to achieve outstanding performance, strategy implementation plans must be clearly developed with clear time frames, allocating specific responsibilities to individuals and identifying the people accountable for task completion.

Jacques (2006) also identifies that major problems in the implementation of medical and care protocols are the lack of senior management involvement and participation in the process. Heide, Grønhaug, and Johannessen (2002) conduct a case study on a Norwegian ferry-cruise company to identify the barriers to strategy implementation. This study reports 174 barriers grouped in these seven categories: communication barriers; organizational structure barriers; learning barriers; personnel management barriers; cultural barriers; political barriers; and resource barriers. Čater

and Pučko (2010) collected data from 172 Slovenian companies and reveal that greater obstacles to strategy execution, such as inadequate leadership skills and employees' reluctance to share their knowledge have a negative influence on firm performance.

Several factors have been argued to influence the successful implementation of strategies. For example, Yang (2010) outlines the elements that influence strategy implementation. These elements include relationships between different departments and units and the executors who implement the strategic plan across different strategic levels. The other elements that influence successful strategy implementation include consensus, commitment, organizational structure, communication and the degree of interactivity at cross-organizational levels of implementation tactics models and approaches (Andrews et al., 2011).

Still other elements that affect implementation quality, a proxy for successful implementation, are trust, participation, past performance, implementation speed and uncertainty (Elbanna, Thanos, & Colak, 2014). Elbanna et al. (2014) argue that the outcomes of decision implementation cannot be modeled in terms of a single perspective. The quality of implementation is shaped by the simultaneous effects of different elements; thus, managers implementing strategic decisions should pay attention to a number of issues. The results of Elbanna's (2014) study suggest that the quality of decision implementation is positively related to trust, participation and past performance, and negatively to implementation speed and uncertainty.

Similarly, Koseoglu, Barca, and Karayormuk (2009) identify compensation practices as an important influence on the success of strategy implementation. The findings from a case-study of Miller (1997) highlight that four factors appear to be critical for the successful management of implementation: backing (the degree to

which influence patterns favor implementation), assessability (the degree to which the success of implementation can be evaluated with precision), specificity (clear aims and planning) and a conducive culture. Factors such as having relevant experience, giving implementation priority, having abundant resources, an appropriate structure and implementing flexibly, appear to matter rather less.

Additionally, Crittenden and Crittenden (2008) set out to understand what actually constitutes strategy implementation. They propose that critical structural levels and managerial skills levers are necessary for successful strategy implementation. These levers allow firms to identify strong and weak points that could impact on the implementation process. The structural levels are (1) Actions by whom, on what, and when of cross-functional integration and company collaboration; (2) Programs instilling organizational learning and continuous improvement practices; (3) Systems installing strategic support systems; and (4) Policies establishing strategy supportive policies. The managerial skills levers are (1) Interacting in the exercise of strategic leadership; (2) Allocating understanding: when and where to allocate resources; (3) Monitoring: tying rewards to achievement; and (4) Organizing the strategic shaping of corporate culture. The eight levers of implementation identified by Crittenden and Crittenden (2008) provide organizations with an evaluative opportunity to determine which levers are working well, and which levers need to be improved.

As indicated above, some current studies also stress the importance of strategy formulation for strategy implementation. Strategy formulation is critical to all organizations; 66% of organizational strategies, however, are never implemented (Johnson, 2004). This suggests that the problem lies somewhere in the middle of the

strategy-performance gap, a more likely source being a gap in the formulation-to-implementation process. If insufficient time and effort are used on executing strategy, or if time and effort are put into inappropriate execution actions, organizational performance invariably suffers (Higgins, 2005).

Studies suggest that firms that excel at implementing strategy have significantly higher firm performance (White, Conant, & Echambadi, 2003). White et al. (2003) conducted research on data collected from 710 marketing managers in the game, toy, and children's vehicle manufacturing industry in the United States. They found that firms with superior implementation capability realize significantly greater firm performance. Since the behaviors of both targeted segments and the market as a whole are constantly changing and market opportunities arise as a result of the changes (Dickson, 1992), firms with the ability to implement, control and evaluate their marketing programs can capitalize on these opportunities by segmenting and providing differentiated offerings to targeted market segments, producing goods or services at lower relative costs and delivering superior customer value (Day & Wensley, 1988). Therefore, firms that implement their marketing strategy successfully can give greater performance because they are more likely to benefit from market opportunities (White et al., 2003).

Morgan, Katsikeas, and Vorhies (2011) empirically examine the performance consequences of the effectiveness of export marketing strategy implementation in the context of manufacturing firms in the U.K. They find that the effectiveness of external marketing strategy implementation is positively associated with both export venture market performance and financial performance. The authors argue that in practice managers often allocate significantly more time and attention to formulating strategic



decisions than to planning and following through on their implementation (Morgan et al., 2011; Rosier, Morgan, & Cadogan, 2010). The study of Morgan et al. (2011) provides a calibration of the performance benefits of the effective execution of planned export marketing strategies. Effectively implementing export marketing strategy to drive venture performance requires the intended export marketing strategy decisions to be realized (Morgan et al., 2011).

Although it is widely perceived as a significant determinant of all performance, most research on strategy implementation has been carried out in the private sector (Andrews et al., 2011; Elbanna, 2013). This study examines the relationship between strategy implementation and organizational performance in the semi-government sector from the perspective of two aspects of strategy implementation; namely, the comprehensiveness of strategic plan implementation and the alignment of strategic plan implementation, as suggested by some researchers (Fadol et al., 2015; Higgins, 2005). The following section covers these two aspects of strategy implementation.

#### **2.6.1.1 Comprehensiveness of Strategic Plan Implementation**

Unlike many studies on the comprehensiveness of strategy formulation, relatively few studies have discussed the comprehensiveness of strategy implementation. Such comprehensiveness, which has been extensively examined, has been defined in several ways. It is viewed, for example, as the extent to which an organization attempts to be exhaustive or inclusive in making and integrating strategic decisions (Grover & Segars, 2005) or as the extent to which an upper executive group uses an extensive decision process when dealing with immediate opportunities and threats (Fredrickson & Mitchell, 1984; Miller, 2008) or the extent to which an

organization's key decision makers have a tendency to use an extensive process for decision-making, which includes a high level of investigation to develop alternative courses of action and multiple criteria to filter these alternatives (Elbanna & Child, 2007; Forbes, 2005; Hakimpour, 2014). For the purpose of this study, the comprehensiveness of strategy implementation, which is a less researched concept, is defined as 'the extent to which an organization attempts to be exhaustive or inclusive in implementing its strategic plan by carrying out all the activities and taking all the actions required for its effective execution' (Elbanna & Fadol, 2016, p. 1).

The most recent study in the UAE on this topic (Elbanna & Fadol, 2016) finds that implementation comprehensiveness is affected by the strategy formulation process and confirms the positive effect of comprehensiveness on organizational outcomes. More specifically, the authors analysed the implementation comprehensiveness of a sample of federal and local organizations in Abu Dhabi and Dubai so as to show whether the implementation process in these organizations addressed all the major activities that were required to put their strategic plans into action. The study concluded that three factors of strategy formulation; namely, the adoption of an intended mode of strategy, enhancing employees' participation and minimizing political behavior during strategy formulation, significantly influenced the comprehensiveness of strategy implementation, which in turn had a significant positive effect on the effectiveness of the strategic planning.

Other studies have identified further antecedents of comprehensiveness. For example, drawing on contingency and institutional theories, Atuahene-Gima and Murray (2004) propose that output and process rewards, task conflict, and project members' intra- and extra-industry relationships are the antecedents of strategy

comprehensiveness. Output reward refers to “a process of monitoring and compensating project members for achieving the desired performance target” (p. 34). It provides incentives for getting the desired result. Process reward is a process of monitoring and compensating project members for completing specified procedures and activities. The key objective of process reward is to ensure that the planned procedures are followed by project members. Task conflict is the disagreement among project members about the content, goals and processes of strategy development and implementation.

The above arguments suggest that comprehensiveness matters for organizational performance and affects it directly or indirectly. This research suggests the former type of relationship and empirically tests it.

#### **2.6.1.2 Alignment of Strategic Plan Implementation**

In order to effectively implement strategies, organizations need to align key organizational factors with strategy. The notion of strategic alignment originates from the organization literature whose fundamental proposition is that organizational performance is the consequence of fit between two or more factors such as strategy, structure, technology, culture, and environment (Bergeron, Raymond, & Rivard, 2004). In Higgins’s (2005) study, alignment is the fit between different strategies and different kinds of structure, system, style, staffing, resources, and the shared values to make them work. The fundamental view of fit propounded by strategic management researchers and organization theorists is that it involves a search to align the organization with its environment and arrange resources to support this alignment (Miller, 1983). Since strategy is the force that mediates between the firm and its

environment, organizational structure must be well suited to the strategy in order to create a significant competitive advantage.

Studies have suggested various ways to achieve alignment. For example, based on the literature across numerous functional and academic disciplines (e.g., strategic management, organizational behavior, operations management, human resources management, organizational development), Pryor et al. (2007) propose a 5Ps model that guides organizations to achieve strategic alignment. The five Ps are Purpose (the organization's mission, vision, goals and objectives, strategies, measurement, and feedback), Principles (the guiding philosophies, assumptions, or attitudes about the way that the organization should operate and conduct business), Processes (involving the physical steps or stages by which inputs are transformed into outputs and elements, such as responsibility, controls, accountability, and authority), People (including employees, customers, suppliers, and others) and performance. The 5Ps must be aligned with each other to achieve maximum efficiency and effectiveness. The integration and alignment of the 5Ps are essential for successful strategy implementation (Beer & Eisenstat, 2000; Raps, 2004).

This study adopts Higgins' (2005) view of alignment. Higgins (2005, p. 5) proposes a practical model for a successful implementation that he calls the 'Eight "S"s of Strategy Execution'. The 8Ss model is a cross-functional way of thinking about ways to execute strategy and implement change across an organization. This model is based on the McKinsey Seven "S"s, which was first introduced by Peters, Waterman, and Jones (1982) in their book entitled "In Search of Excellence".

The underlying principle of the 8Ss model is that different strategies require different kinds of structure, system, style, staffing, resources, and shared values to

make them work. Thus, the 8 Ss are Strategy and Purposes, Structure, Systems and Processes, Leadership Style, Staff, resources, Shared Values and Strategic Performance (Higgins, 2005). Table 1 summarizes these 8Ss.

Table 1: The Eight (8) ‘S’s of Strategy Execution Defined

	<b>Definition</b>
1. Strategy and Purposes	<p>Strategies are formulated to achieve organizational purposes. Changes in strategic purposes lead to changes in strategy. Strategic purposes include strategic intent, vision, focus, mission, goals, and strategic objectives. There are four types of strategy: corporate, business, functional, and process, designed to achieve these purposes.</p> <p>The corporate strategy defines what business or businesses the firm is in or should be in, and how the firm will fundamentally conduct this business. The business strategy describes how a firm will compete in a particular business. Functional strategies in the areas of marketing, finance, operations, human resources management, research and design, and logistics should be aligned with the business strategy. Process strategies are aimed at integrating organizational processes across the organization.</p>
2. Structure	<p>The organization’s structure consists of five parts: jobs; the authority to do these jobs; the grouping of jobs in a logical fashion, for example, into departments or divisions; the manager’s span of control; and the mechanisms of coordination.</p>
3. Systems and Processes	<p>The systems and processes that enable an organization to get things done from day to day (for example, strategic planning systems, information systems, capital budgeting systems, manufacturing processes, reward systems and processes, quality-control systems and processes, performance measurement systems).</p>
4. Style (leadership/ management style)	<p>The consistent pattern of behavior exhibited by leaders/managers when relating to subordinates and other employees.</p>
5. Staff	<p>The number and types of employees with whatever types of individual and group competency the firm needs to meet its strategic purposes.</p>

	<b>Definition</b>
6. Resources	The extent to which the organization has adequate resources to achieve its strategy: people (staff), technology and money are the three most critical.
7. Shared Values (organizational culture)	The values shared by members of the organization. Managing values and cultural artefacts are critical to successfully leading organizational change.
8. Strategic Performance	Strategic performance is a derivative of the other seven Ss. Strategic performance is possessed by an organization as a whole, or the profit-based parts of the whole.

Source: Higgins (2005, p. 5).

By using the 8Ss model in the strategizing process, managers can anticipate what needs to be changed in the organization in order for the strategy to work. Therefore, the model serves as a road map for implementation during the execution stage. It can help managers to find what has caused strategy execution to fail.

Researchers argue that aligning organizational factors with strategy can lead to successful strategy implementation and superior performance. Pryor et al. (2007) propose a 5Ps model that includes purpose, principal, process, people and performance. They argue that the integration and alignment of the 5Ps are essential for successful strategy implementation (Beer & Eisenstat, 2000; Raps, 2004). Similarly, many researchers have discussed the strategic alignment of the information system and firm performance (Bergeron et al., 2004; Lee & Pai, 2003). For example, Bergeron et al. (2004) find that low-performance firms exhibited a conflictual coalignment pattern of business strategy, business structure, IT strategy, and IT structure. The coalignment approach transcends both strategic integration (bivariate fit between business strategy and IT strategy) and operational integration (bivariate fit between business structure and IT structure) to achieve systems integration, thus increasing performance. Sledgianowski, Luftman, and Reilly (2006) also argue, from a strategic alignment

perspective, that it is critical to create a “strategic fit” between the IT infrastructure and IT strategy to achieve business value. On similar lines, Lee and Pai (2003) find that the maturity of the information systems function has a strong effect on strategic information systems planning and that IT-business alignment improves with the effectiveness of a firm’s planning process.

Although the information system’s strategic alignment has been well discussed, relatively few studies focus on discussing the strategic alignment in the organizational strategy and many different organizational factors, such as structures, systems, style, staffing, resources, and shared values, as proposed by Higgins (2005). Thus, this study will try to close this gap and empirically test the importance of strategic alignment for strategy implementation and organizational performance.

### **2.6.2 Strategic Plan Implementation and Organizational Performance**

Strategy implementation has been argued to be a significant determinant of performance (Andrews et al., 2011). For example, Long and Franklin (2004) suggest that one of the key variables when studying implementation is the implementation approach or implementation style, which refers to the processes used to put strategy into practice (Andrews et al., 2011). Long and Franklin (2004) argue that implementation can be carried out in a centralized, decentralized, or mixed approach way, consisting of top-level policy guidance and bottom-level, administrative expertise. The authors argue that the one-size-fits-all approach to implementation is not suitable, since each organization has unique challenges determined by the specific context of the organizations. These challenges can be met only by some sort of adaptive or evolutionary implementation approaches.

Some researchers have also investigated the relationship between the style of implementation and performance. For example, the study of Thorpe and Morgan (2007) of private sector service organizations finds that implementation styles influence the effectiveness of implementation. Contrary to the literature that has recommended bottom-up marketing planning, the findings of Thorpe and Morgan (2007) show that if the firm displays an implementation environment characterized by hierarchical structures and strong top-down influences, then its marketing strategy implementation will be more effective. Thus, there is a need for a degree of top-down imposition, but fostering the cooperation of mid-level marketing managers through bottom-up initiatives is required in the implementation process.

Similarly, Andrews et al. (2011) study the relationship between strategy implementation style and public service performance. Based on Bourgeois & Brodwin (1984), Andrews et al. (2011) identify three kinds of implementation style; namely, the rational implementation style, the incremental style and implementation with no clear style. The rational implementation style has centralized control. Formal means are used to achieve compliance and strategy formulation and implementation are viewed as sequential activities, following deliberately formulated strategies. In the incremental style, organizations decentralize their responsibilities and a loose distinction is made between strategy formulation and implementation. Finally, it is also possible for organizations to have 'no clear style of implementation'. In this case, strategy implementation is not discernible (Andrews et al., 2011).

The results of Andrews et al. (2011) indicated that none of the implementation styles generates better performance by itself and that implementation style is important only in combination with the three types of appropriate strategic stance or strategic



orientation (i.e., prospector, defender or reactor). More specifically, their results show that strategic orientation moderates the relationship between implementation style and organizational performance such that a rational style of implementation is positively correlated with performance, whereas incremental style and implementation with no clear style is negatively correlated with performance.

In other words, Andrews et al.'s (2011) study suggests that the positive impact of strategy implementation on firm performance is dependent on whether there is a fit between strategic stance and implementation style. Only when a closer synonymy is achieved between strategic stance and implementation style is, organizational performance enhanced. Brenes, Mena, & Molina (2008) offer a similar contingency relationship where successful strategy implementation requires a deliberate and systematic management of five dimensions; namely, a strategy formulation process; systematic strategy execution; strategy control and follow-up; the leadership of top management supported by suitable, motivated managers and employees; and corporate governance (Brenes et al., 2008).

The relationship between strategy implementation and organizational performance is also addressed by many researchers. Others, for example, Hickson, Miller, and Wilson (2003) examine the link between implementation and performance. They propose two distinct approaches to implementation management: the experience-based approach and the readiness-based approach. In the experience-based approach, management knows enough to assess what the end goals are, what has to be done beforehand and what appropriate personnel, finance and time can be used. The readiness-based approach occurs where the climate is receptive but experience is relatively lacking. This approach seems to begin with the hope that things will be

managed somehow and managers can learn by doing. Hickson et al. (2003) conclude that although either approach may enhance decision performance, great success is associated with a combined approach. Similarly, the marketing strategy literature suggests that the effective implementation of planned marketing strategy is a key driver of firm performance (Olson, Chae, & Sheu, 2005). Morgan, Katsikeas, and Vorhies (2012) discuss kind of export marketing strategy implementation based on the implementation literature in marketing and strategic management. The results indicate that the effective implementation of planned export marketing strategy contributes to export market and financial performance.

The above arguments suggest that strategy implementation positively affects organizational performance. The author of the present study further suggests that, for this positive effect to occur in organizational performance, the two aspects of the implementation process reviewed earlier (i.e., comprehensiveness and alignment), should be positively related. More specifically, the author suggests that comprehensiveness has a positive impact on organizational performance. The support for this argument comes from several studies pointing out that comprehensiveness is an important factor affecting the successful management of strategy formulation and implementation and that there is a positive relationship between comprehensiveness and organizational performance. Miller et al. (1998) for example, argue that strategic decision-making comprehensiveness allows managers to better understand their environment and to be more capable and effective in judging the environment's potential effect on their organization, thereby ensuring effective decision making and improving organizational performance.

Similarly, we claim that this argument can be extended to the realm of strategy implementation. For example, the positive relationship between comprehensiveness and organizational performance was established in the context of strategy implementation in a recent study by Elbanna and Fadol (2016), who analyse the strategy implementation processes in federal and local organizations in the UAE to show how these organizations carried out their activities and took the actions required for effective execution of their strategic plans. The study concluded that comprehensiveness positively affects organizational performance in both private and public settings, a result that supports Zinn and Flood (2009)'s finding that comprehensiveness permits managers to act strategically to exploit opportunities. This has also been supported by a more recent study in the Canadian public sector (Elbanna, Andrews, & Pollanen, 2015).

As pointed out earlier, the alignment of strategy implementation should also positively affect organizational performance. Aspects of the firm such as culture, organizational structure, and management style may have a profound effect on implementation processes (Noble, 1999). Aligning and integrating organizational factors with strategy should allow organizations to achieve superior performance (Slater & Olson, 2000). At the organizational level, a proper relationship between strategy, structure and control can create an environment that is conducive to implementation success. At an interpersonal level, the degree of shared understanding among implementation managers is critical. At the individual level, the cognitive processes and commitment to strategy of the involved managers are important for performance (Noble, 1999). Similarly, Pryor et al. (2007) claim that continually ascertaining the proper alignment of organizational Purpose, Principles, Processes, and People is a requisite in successfully implementing the firm's strategies. Additionally,

Govindarajan (1988) has found that a match between appropriate administrative mechanisms and strategy can reduce uncertainty within the firm and increase the effectiveness of the marketing strategy implementation.

Based on the above discussions and the literature review presented in Part 2.6.2.1 and Part 2.6.2.2, the following hypotheses are proposed.

H3: Comprehensiveness of strategic plan implementation is positively related to organizational performance.

H4 Alignment of strategic plan implementation is positively related to organizational performance.

## **2.7 Strategic Plan Evaluation**

### **2.7.1 Concept of Strategic Plan Evaluation**

Strategy evaluation is a relatively unexplored research field (Oliveira & Pinho, 2011), despite the fact that it is a crucial stage for successfully transforming a strategic intent into a strategic practice and that many researchers have contributed to this field (Laurian et al., 2010; Seasons, 2003). Strategy evaluation can be defined as “the activities and actions required for assessing the strategic plan” (Elbanna, 2013, p. 434). It monitors the performance of organizations and helps organizations to realize the desired objective and validate the success or failure of the given strategy (Weiss, Berger, & Hatcher, 2008). Weiss et al. (2008) define evaluation as the process of asking questions related to a particular topic and collecting and analysing information to answer those questions. This process implies an iterative process and is carried out

to generate continuous feedback about a particular strategy or strategies being implemented.

Weiss et al. (2008) propose that there are two types of evaluation; namely, process evaluation and outcome evaluation. Process refers to the groundwork needed to achieve the outcome objectives. It describes what the organizations are doing and how they will do it. Process evaluation is “conducted to assess whether a strategy is being implemented as planned and whether it is reaching its intended population” (Weiss et al., 2008, p. 1). It is a sort of quality assurance that focuses on the implementation. Outcome refers to “changes in attitude, knowledge, behaviour and long-term implications” (Weiss et al., 2008, p. 12). Outcome evaluation aims to assess if the intended outcomes of the strategic plan are achieved. Outcome evaluation allows organizations to evaluate whether the strategies are effective. Coupled with process evaluation, outcome evaluation can be used to determine whether or not a strategy intervention was responsible for any observed outcomes. Outcome evaluation is valuable for organizations; as Carmona (2007) argues “a final analysis of the ‘outcome quality’ can only be made when the actual outcomes from the process themselves are evaluated” (p. 4).

Other researchers have argued that there are three types of evaluation: ex ante evaluations, ongoing evaluations and post hoc evaluations (Guyadeen & Seasons, 2015). Ex ante evaluations occur during the planning stage. In this stage, managers evaluate different plans and one solution path is chosen from among alternative proposals (plans). Ongoing evaluations take place during the implementation stage. Last post hoc evaluations are made after the implementation stage. The purpose is

usually to discover if the plan was implemented, and if so, how it performed (Alterman & Hill, 1978).

Studies also offer other types of strategy evaluation. For example, Laurian et al. (2010) propose four types of evaluations: goal or objective-driven evaluation, theory-driven and theory-based evaluation, stakeholder-focused evaluation and data-driven evaluation. Goal or objective-driven evaluation focuses on whether strategic goals and objectives are achieved (Weiss, 1972). It is positivist, in that it assumes that well-designed and implemented interventions have clear goals and yield expected outcomes, which can be assessed by neutral experts. This approach is widely used to evaluate strategic plans (Berke et al., 2006; Laurian et al., 2004; McCoy & Hargie, 2001). However, these evaluations are complicated because plan goals are not always clear, multiple strategies are used to achieve goals, outcomes are difficult to measure, and it is extremely difficult to attribute observed outcomes to particular plans.

In contrast, theory-driven evaluation seeks to clarify the relationships between programs and outcomes (e.g., Weiss, 1997). This approach focuses on identifying and modeling program logic and causal relations between programs and outcomes (Benear & Coglianese, 2005). It is most useful for ex post evaluation (Lunt, Davidson, & McKegg, 2003). However, in practice, establishing the causal relationships between a program and all its direct and indirect effects is extremely difficult (Davidson, 2000).

The third form of evaluation is stakeholder-focused evaluation (Patton, 1997). This approach is based on stakeholders' deliberations and understanding of the strategic goals, functioning, and outcomes. It is also referred to as 'responsive' or 'constructivist' evaluation (McCoy & Hargie, 2001). This approach takes stakeholders'

view into consideration; however, sometimes stakeholders tend to focus on short-term and visible outcomes over long-term or large-scale cumulative impact. Finally, the last type of evaluation is data-driven evaluation. It is used to track changes over time rather than assess the specific impact of strategic plans. Thus, it cannot address the question of attribution.

According to Weiss et al. (2008), evaluation should be conducted in five steps. These steps are identifying and involving stakeholders, describing strategy, designing the evaluation, establishing an action plan and collecting and analysing the data. In the same context, other researchers suggest the number of planners involved in plan making, and the sharing of information, contribute significantly to plan quality (Tang & Brody, 2009). Improving stakeholder consultation during the planning process is another important consideration (Guyadeen & Seasons, 2015).

Studies show that, to effectively conduct strategy evaluation, organizations need sufficient resources (Guyadeen & Seasons, 2015). Those resources include properly trained staff, financial resources and technical support for evaluation research (Bell, 2004). Although organizations typically position strategic evaluation as a decision-support and learning tool, in practice planning organizations tend to ‘front-load’ resources during plan development (Waldner, 2004), leaving limited resources for evaluation once plans are implemented. This happens because planners are future oriented and may be biased towards generating future plans rather than evaluating old ones (Waldner, 2004).

Another challenge related to evaluation is the lack of generally accepted outcome evaluation methodologies and performance measurements. There are few studies that inform the evaluation of plan outcomes. Laurian et al. (2010) proposed

and tested a plan-outcome evaluation methodology in New Zealand. They argue that there is a substantive lack of ex post outcome evaluations that focus on land use plans; thus it is difficult for planners to show the impact of their plans and activities (Guyadeen & Seasons, 2015). In addition, there are also challenges related to performance measurement that impede the evaluation of plan outcomes. Researchers argue that it is difficult to isolate planning outcomes from the external influences that might also have bearing on the situation; therefore it is hard to draw clear and distinct causal links between planning actions and planning outcomes (Carmona & Sieh, 2008; Laurian et al., 2010).

As reviewed below, studies show that strategy evaluation has beneficial impacts on outcomes, which include strategic direction, fit with the environment, communication with stakeholders and performance (Elbanna, 2013). To better understand why evaluation generates beneficial outcomes, researchers have suggested examining evaluation from its several dimensions, such as strategic control (Elbanna & Fadol, 2016; Merchant & Otley, 2006) and accountability (Cavalluzzo & Ittner, 2004). The following section discusses the literature on these two dimensions.

## **2.7.2 Dimensions of Strategic Plan Evaluation**

### **2.7.2.1 Accountability**

Paul (1992, p. 2) defines accountability as “holding individuals and organizations responsible for performance measured as objectively as possible”. In the HarperCollins Dictionary of American Government and Politics, accountability is defined as the extent to which one must answer to higher authority – legal or organizational – for one’s action in society at large or within one’s organization.



Similarly, Gray and Jenkins (1993, p. 55) define accountability as ‘an obligation to present an account of and answer for the execution of responsibilities to those who entrusted those responsibilities’. For accountability, it is necessary to keep accurate records of property, documents or funds (Shafritz & Shafritz, 1992).

Accountability is a complex, abstract and elusive concept (Crofts & Bisman, 2010) because it takes various forms, including communal, contractual, managerial and parliamentary (Demirag, Dubnick, & Khadaroo, 2004; Laughlin, 1996; Sinclair, 1995; Stewart, 1984). Communal accountability involves seeking the legitimacy and consensus of stakeholder groups affected by a particular policy through their participation in the decision making process (Demirag & Khadaroo, 2011). The contractual accountability process involves entering into a legally binding agreement over standards of performance and creating liabilities and the obligation to comply through the judicial process (Dubnick, 1998). Managerial accountability involves making ‘those with delegated authority answerable for producing outputs or the use of resources to achieve certain ends’ (Sinclair, 1995, p. 222). Organizational internal structures are set up to implement, monitor and evaluate programs (Demirag et al., 2004). Parliamentary accountability is the process of holding government executives to account for the policies they have pursued (Demirag et al., 2004). In this study, the researcher mainly focuses on discussing managerial accountability.

Crofts and Bisman (2010) conducted a content analysis of journal articles which discussed accountability and revealed that researchers pay more attention to accountability within “accounting”, “financial”, and “reporting” contexts, in particular from public and social perspectives, while comparatively they emphasize managerial accountability less in regard to cost, quality, and control (Crofts & Bisman, 2010). In

the same vein, Carnegie and West (2005) and Martin and Kloot (2001) have suggested an overemphasis on accounting and financial perspectives in accountability, at the expense of broader considerations of the managerial facets of accountability. The study of Crofts and Bisman (2010) also highlights the relative paucity of accountability research conducted within the private sector and not-for-profit organizations in comparison to government and public sectors. From the above discussion, the researcher argues that it is important to discuss not only financial accountability and external accountability but also the internal development of accountability mechanisms and process accountabilities. Thus, this study will further investigate how managerial accountability as a dimension of strategic evaluation influences organizational performance.

The current literature has discussed the factors that influence accountability. Using data from a government-wide survey administered by the US General Accounting Office, Cavalluzzo and Ittner (2004) examine some of the factors influencing accountability in government activities. They find that organizational factors such as top management commitment to the use of performance information, decision-making authority, and training in performance measurement techniques all exhibit significant, positive direct and indirect effects on accountability. In other words, the extent to which government managers are held accountable for achieving results is influenced not only by the extent of performance measurement, but also by managers' knowledge of and ability to apply management techniques and by top management's commitment to achieving results. In addition, the level of accountability must be aligned with the decision-rights granted to managers. Greater accountability can be achieved only when managers have expanded authority over spending, human resources, and other management functions. However, in reality,

laws, bureaucratic rules, and the separation of powers in different branches of government can place severe constraints on managers' decision-making authority, and thereby the extent to which they can be held accountable for results (Cavalluzzo & Ittner, 2004).

The current literature also discusses the relationship between accountability and performance. Some researchers suggest that there is a positive relationship between accountability and performance. Dubnick (2005) argue that accountability leads to superior performance. The reason behind this may be that accountability calls on institutional managers to define their mission publicly, set goals, establish strategies and activities to accomplish these goals, and measure and report the outcomes of their activities (Oakes & Young, 2008). These reported outcomes have to be linked to inputs and used as benchmarks to compare organizations. Instead of requiring mostly financial information, accountability would require the disclosure of nonfinancial quantitative information about how well the organizations are fulfilling their mission (Herzlinger, 1995; Oakes & Young, 2008).

Another plausible explanation for the positive impact of accountability on performance is that accountability is often associated with the execution of responsibilities and being answerable for them. Kwon and Zmud (1987), for example, have studied this in the context of IT implementation and suggest that one of the major organizational factors in IT implementation success is the level of worker responsibility. In addition, the level of accountability is expected to be positively associated with decision-making authority, and thereby the extent to which managers can be held accountable for results. Still another explanation comes from Cavalluzzo and Ittner (2004), who suggest that performance measurement development and

outcomes are positively associated with the extent to which managers have the authority to make decisions based on performance information. When managers have the authority to make decisions based on performance information and when they are held accountable for results, they are more likely to make decisions accurately and carefully, thus improving performance. Martinez and Nilson (2006) look at South Dakota's performance funding and find that state accountability contributed to institutional performance to some extent.

However, other researchers suggest that accountability does not necessarily lead to positive performance. Volkwein and Tandberg (2008) determine that state accountability did not contribute to state grades in *Measuring Up* 2002, 2004, and 2006. Huisman and Currie (2004) conducted comparative case studies on the new accountability and have found that performance-based accountability was not successful in enhancing institutional performance. Shin (2010) suggests that adopting a form of performance-based accountability may not contribute to institutional performance if the new accountability is not well grounded in institutional practices. Demirag and Khadaroo (2011) also argue that accountability and performance (value for money) relationships are problematic because it is often difficult to trace the value for money benefits of private financial incentive projects and as a result it is presumably difficult to hold public sector executives accountable for public services. In addition, the measurement of performance is difficult (Cavalluzzo & Ittner, 2004), in particular in environments where the problem of multiple and diverse expectations is magnified (Demirag & Khadaroo, 2011).

Since there is no consensus on whether accountability leads to positive performance, it is necessary to further examine this relationship in the present study.

In his attempt to examine this relationship, the author uses Cavalluzzo and Ittner's (2004) views of accountability in examining its relationship to organizational performance.

### **2.7.2.2 Strategic Control**

Strategic control has been a "hot issue" due to the fact that companies often had serious difficulties responding in a timely manner to the failure of plans and unexpected developments, because they do not have information about the ongoing validity of the chosen strategic plan (Leonard, 1984). Therefore, researchers and managers have underlined the value of strategic control and suggested specific procedures (Schreyögg & Steinmann, 1987) and outcomes for it (Elbanna, 2016).

Researchers have given different meanings to the term 'control' (Gigliani & Bedeian, 1974). Schendel and Hofer (1979), for example, provide a popular definition: Strategic control "focuses on the dual questions of whether: (1) the strategy is being implemented as planned; and (2) the results produced by the strategy are those intended" (p.8). This definition refers to the traditional review and feedback stage that constitutes the last step of the strategic management process. Elbanna (2016) sees strategic control as a tool to 'align the goals of individuals with [the] strategic goals' of their organizations. According to other researchers, strategic control refers to directing subordinates or systems to ensure proper actions (Lengnick-Hall & Fatterman, 1984) or to the critical evaluation of plans, activities, and the provision of information for future action (Schreyögg & Steinmann, 1987, p. 91), which reflects the view of strategic control adopted in the present study.

In order to better understand strategic control, it is necessary to discuss budgetary control and strategic control. The concept of budgetary control is of course closely related to budget. A budget specifies a goal, such as the total cost of a certain quantity of product; it may also specify the means of accomplishing the goal, such as the material and labor involved (Bruns & Waterhouse, 1975). Budgets are financial plans that provide a basis for directing and evaluating the performance of individuals or firms. Budgets help firms to coordinate and control the activities of different parts of a firm (Bruns & Waterhouse, 1975). Budgetary control refers to “the application of a comprehensive system of budgeting in the organization to assist the management in the process of its planning, coordinating, controlling and performance evaluation. It is an effective tool to the management to achieve the business goals and objectives of the organization” (Debarshi, 2011, p. 468).

Budgetary control is used to track management performance against defined cost and revenue objectives and thus provides the basis for feedback and incentives in terms of career, compensation and the sense of achievement (or failure) that results from being ahead of (or behind) budget (Goold & Quinn, 1990). It also provides managers with a highly effective control tool and ensures that important aspects of a business (such as cash management) are properly planned and monitored (Merchant, 1985).

Neely, Filippini, Forza, Vinelli, and Jasper (2001) argue that there are some weaknesses of budgetary controls’ for example, budgets constrain responsiveness and are often a barrier to change, budgets concentrate on cost reduction rather than value creation, and, considering the time required to prepare them, add little value. In addition, budgetary control does not cover non-financial objectives that may be critical

for obtaining secure profitability and competitive strength. It does not pay attention to longer-term goals and objectives (Goold & Quinn, 1990). Hope and Fraser (2003) also argue that budgets are increasingly inappropriate for organizations desiring to achieve high performance in competitive conditions, and should be abandoned.

Researchers also find that budgetary control may not contribute to positive financial performance. For example, Dunk (2011) found that when the emphasis is on using budgets as a planning mechanism, budget facilitates product innovation, impacting positively on the financial performance of firms. In contrast, when the emphasis is on using budgets primarily as a control mechanism, it is unlikely that product innovation will contribute to financial performance.

On the contrary, strategic controls involve longer term objectives because they focus on competitive benchmarks, non-financial performance measures and long-term outcomes (Goold & Quinn, 1990). This means that, with strategic control, organizations need to look for external data and undertake less routine analysis. Some authors also argue for a broader conception of strategic control, such that differences between actual and planned outcomes lead not only to modification of the actions of individuals, but also to questioning of the assumptions of the plan itself (Argyris & Schon, 1978; Lorange & Murphy, 1984).

Lorange (1988) proposes a comprehensive approach to strategic controls. He distinguishes three levels in the organization (i.e., the 'overall portfolio' or corporate level, the 'business family' or divisional level and the 'business element' or SBU) and suggests that organizations must monitor the performance at each level. This requires establishing, at each level, i) the strategic objectives (the eventual objectives, in terms of competitive strategy), ii) the strategic programs and milestones (the specific tasks

by which the strategic objectives will be accomplished, and by when), iii) the strategic budgets (the resources to be spent on strategic programs) and iv) the operating budgets.

Strategic control is closely related to management control systems (MCS). Management control systems have been recognized as important in the formulation and implementation of strategies (Bromwich & Bhimani, 2005). MCS can give useful and valuable information for an organization's decision-making, planning and evaluation processes (Merchant & Otley, 2006) and are employed by many organizations as a tool to support their strategies and to conduct strategic control (Golgeci & Ponomarov, 2013). Control generally involves (1) setting objectives, (2) deciding on the preferred strategies for achieving these objectives, and then (3) implementing these strategies and (4) making sure the strategies are implemented (Merchant & Otley, 2006).

Any system, such as budgeting or a balanced scorecard, can be categorized as an MCS (Malmi & Brown, 2008). The balanced scorecard originates from Porter's concept of strategy as a response to competitive forces in an industry. It is a management control system popularized by Kaplan and Norton (1992) and (Kaplan, 2001). The balanced scorecard moves performance measurement away from its traditional focus on purely financial measures (Woods & Grubnic, 2008). It serves as a feed forward control system and a performance measurement system. The balanced scorecard covers four component perspectives within a company: financial, customer, internal business processes and learning and growth (Woods & Grubnic, 2008).

Although several researchers find a positive relationship between strategic control and firm performance, researchers do suggest that strategic control positively influences firms' activities and capabilities. The reason is that MCS can co-ordinate



the efforts of employees; motivate individual managers; and alter direction depending on circumstances (Liviu, Sorina, & Radu, 2008). Strategic controls can be used to clarify how to evaluate whether a performance is good or bad; make explicit the trade-offs between profit and investment; introduce individual targets; and ensure managers choose the right time to intervene when business performance deteriorates (Liviu et al., 2008).

Strategic control has been found to positively influence an organization's capabilities (Chenhall et al., 2011; Morris, Allen, Schindehutte, & Avila, 2006). For example, Chenhall et al. (2011) find that formal controls have an influence on helping organizations develop innovation. Financial plans can be used to encourage people to project themselves into the future, to see new opportunities and threats and to adopt new strategic postures (Davila, Foster, & Oyon, 2009). Formal controls also help firms to identify areas that may need more innovative effort and to motivate managers to improve effectiveness in generating innovation by developing and assessing reward systems related to innovative effort (Simons, 2000). In addition, strategic control systems give strategic direction to firms' innovative efforts and the efficiencies they produce can free up resources for innovation (Marginson, 2002).

A number of researchers have sought to link control systems, strategic choices, and performance (Nilsson, 2002). Kober, Ng, and Paul (2007) discuss the interrelationship between MCS and strategy. They find a two-way relationship between MCS and strategy. That is, the MCS both shapes, and is shaped by, strategy. Simons (1991) suggests that control systems can serve not only as a vehicle for implementing strategy, but can help focus management attention on strategic uncertainties, thereby facilitating the emergence of new competitive strategies.

Elbanna (2016) examines the impact of strategic control on organizational politics; and how the latter influence the effectiveness of strategic planning in the UAE setting. His results show the importance of strategic control in organizational processes and outcomes. Marginson (2002) examines the effect of three groups of control mechanisms on strategy formulation at a middle-management level and concludes that different facets of control systems can be used to affect strategic change, secure strategy implementation, and ensure that performance standards are met in key areas of the strategy process. Further, Marginson (2002) argues that it is more the particular design of a control mechanism than the way in which managers interpret its use strategically that determines the influence of the control system. A recent study shows that the control of plans and of goal achievement contributes significantly to firm performance (Wijewardena, De Zoysa, Fonseka, & Perera, 2004).

In this study, we adopt Schreyögg & Steinmann's (1987) view of strategic control and focus on discussing whether managers monitor the environmental conditions (e.g., forecasts of inflation or market growth rate, etc.), accomplish the objectives of the intermediate plans and the master strategic planning, engage in a systematic and continuous effort to identify and appraise the unforeseen effects of the implemented decisions, and engage in an effort to monitor the full range of emerging events inside and outside the organization that are likely to threaten the course of the organization's strategic action.

### **2.7.3 Strategic Plan Evaluation and Organizational Performance**

Researchers point out that there are many benefits of conducting strategy evaluation (Guyadeen & Seasons, 2015). Evaluation fosters continuous learning in

planning; and thus, it enables managers to assess the plans and understand what distinguishes good planning from bad planning (Baer, 1997). Evaluation also supports constant improvement in the profession (Balsas, 2012; Oliveira & Pinho, 2011). By conducting evaluation, managers can improve the planning process and the implementation of plans, thus achieving the intended outcomes (Seasons, 2003) and improving organizational performance.

As indicated earlier, strategy evaluation has a positive impact on outcomes, which include strategic direction, fit with the environment, communication with stakeholders and performance (Elbanna, 2013). Similarly, Andrews et al. (2011) contend that implementing strategic plans is widely accepted as a critical element of strategy and one that can have a significant impact on organizational performance. Brenes et al. (2008) also suggest that one of the significant determinants of strategy success is the systematic execution of strategy. It is also a critical cornerstone in the building of a capable organization.

Among the other benefits of conducting a strategy evaluation (Guyadeen & Seasons, 2015) is its fostering of continuous learning in planning; thus, it enables managers to assess the plans and understand what distinguishes good planning from bad planning (Baer, 1997) and supports constant improvement in the profession (Balsas, 2012; Oliveira & Pinho, 2011). By conducting evaluation, managers can improve the planning process and the implementation of plans, thus achieving intended outcomes (Seasons, 2003) and improving organizational performance. Pershing (2006) suggests that performance improvement is a systematic combination of three fundamental processes: performance analysis, cause analysis and intervention selection. Cause analysis allows firms to identify the causes of gaps in performance

and the intervention selection process allows firms to select appropriate solutions based on the results of cause analysis. Strategy evaluation is closely related to performance analysis. Through conducting strategy evaluations, firms can identify any adjustments that have to be made during and after development and implementation, so that resources are maximized and organizations efficiently and effectively deliver valuable results (Guerra-López, 2008).

Evaluation is a series of processes and procedures. Evaluation can provide managers with relevant and reliable data to make justifiable decisions about which programs to continue and how to improve these programs (Guerra-López, 2008). Evaluation reports can be used to market firms' successes to internal and external customers (Guerra-López, 2008). It provides decision makers with feedback, which works as a responsive and clear recipe for improving performance (Guerra-López, 2008).

The above arguments suggest that strategy evaluation positively affects organizational performance. The author of the present study further suggests that, for this positive effect to occur, the two aspects of the evaluation process reviewed earlier (i.e., accountability and strategic control) positively affect organizational performance. More specifically, the author suggests that accountability has a positive impact on organizational performance. Support for this argument comes from several studies. For example, Dubnick (2005) argues that accountability leads to superior performance. Accountability will result in (1) greater transparency and openness (the promise of democracy) (Schedler, Diamond, & Plattner, 1999); control for the abuse and misuse of authority (the promise of justice) (Ambos, 2000); promoting appropriate behavior on the part of public officials (the promise of ethical behavior) (Dubnick, 2003); and

improvements in the quality of government services (the promise of performance), (5) promoting learning in pursuit of continuous improvement.

Similarly, strategic control should also positively affect organizational performance because it has been found to be positively related to organizational capabilities (Chenhall et al., 2011; Morris et al., 2006). Formal controls also have an influence on helping organizations develop innovation Chenhall et al. (2011). Henri (2006) has found that using strategic control, specifically, performance measurement systems, can positively influence organizations' four capabilities (i.e., market orientation, entrepreneurship, innovativeness, and organizational learning). These capabilities are more likely to help firms to achieve great organizational performance.

Based on the above discussions and the literature review presented in Part 2.7.2.1 and Part 2.7.2.2, the following hypotheses are proposed.

H5: Accountability is positively related to organizational performance.

H6: Strategic control is positively related to organizational performance.

## **2.8 Organizational Performance and Organizational Competitiveness**

As mentioned earlier (Part 2.4), organizational competitiveness has been defined as the ability of a firm to design, produce and or market products superior to those offered by competitors, considering price and non-price qualities (D'Cruz & Rugman, 1992). Early studies argued that competitiveness is related to performance (e.g., Rainer and Kazem (1994, p. 58)). Empirical evidence also suggests that competitiveness is positively associated with improved efficiency, quality improvement, productivity improvement and cost savings (Purba and Diane, 2005),

and with customer satisfaction and market performance (Tracey et al., 1999), which can be seen as the proxies of performance.

It was also mentioned earlier that past research suggested that strategy implementation (i.e., managerial involvement in the implementation), along with advanced manufacturing technology, is related to competitive capabilities (Tracey et al. (1999). Similarly, Lu et al. (2008) suggest that higher levels of competitiveness can be attained by effective strategy formulation and implementation, which can be achieved, according to the authors, by having an explicitly defined competitive strategy and matching strategy to a company's situation. Pryor et al. (2007) also suggest that implementation expertise and capability can equally contribute to creating and maintaining sustainable competitive advantage, which is suggested to be associated with competitiveness (Waheeduzzaman & Ryans, 1996). Furthermore, Hauc and Kovač (2000) indicate that combining a prompt and effective strategy with a correct and quick strategy formulation generates better competitiveness.

The author suggests that not only formulation and implementation, as suggested by the above early research, but also evaluation, is related to organizational competitiveness. The author further suggests that the impacts of formulation, implementation and evaluation on competitiveness occur through their individual effects on organizational performance.

Based on the above arguments and the literature review on organizational competitiveness in Chapter 2.4, the following hypothesis is proposed:

H7: Organizational performance is positively related to organizational competitiveness.

## **2.9 Environmental Characteristics (Environmental Dynamism)**

Strategy processes are influenced by environmental attributes such as uncertainty, complexity, munificence, and dynamism (Dess & Beard, 1984; Hutzschenreuter & Kleindienst, 2006; Sharfman & Dean, 1991). Duncan (1972) argues that environmental characteristics can be related to both internal and external conditions. The internal environment consists of the relevant physical and social factors within the boundary of an organization that are taken into consideration in the decision-making behavior of individuals in the system. The external environment is formed from the relevant physical and social factors outside the boundary of an organization that are taken into consideration in organizational decision-making. This study discusses only the external environment. Early organization literature documents well the fact that variability across organizational environments affects the nature of organizational strategies and strategy formulation. Many scholars have discussed the impact of the environment on managerial practices and organizational performance (Goll & Rasheed, 2004). For example, Khandwalla (1976/1977) find that when managers perceive their environment as dynamic and uncertain their strategies are likely to be more comprehensive or multifaceted. Hrebiniak and Snow (1980) analysed patterns of organizational response to uncertainty, and found significant differences between industries, suggesting the importance of the industrial context for managerial perceptions and responses. When formulating the resource dependence theory, Pfeffer and Salancik (1978) argued that the business environment acts as an important source of organizations' resources such as personnel, product and services, information, and funds. Kennerley and Neely (2003) examine the measurement of performance in a changing business environment. Based on their findings, they recommend that organizations should adopt measurement practices that take cognizance of the dynamic

and rapidly changing environments in which they operate. In addition, Pasanen (2003) proposes that such environmental states as dynamism affect the way in which the enterprises performed in the context of the small and medium-sized enterprises in Finland.

The previous literature mainly focuses on discussing four environmental characteristics: dynamism (Li & Liu, 2014), complexity (Chandler, 1962), munificence (Goll & Rasheed, 2005) and hostility (Elbanna & Child, 2007; Miller & Friesen, 1978). Similarly, according to the work of Okeyo (2014), the aspects of the environment are munificence, dynamism and complexity. Each dimension constitutes a critical environmental condition and plays an important role in moderating organizational actions (Castrogiovanni, 1991; Park & Mezias, 2005). This study discusses environmental dynamism and its moderating impact on the relationship between the three components of strategic management and organizational performance. This choice is due to the fact that dynamism or uncertainty is the most examined environmental feature in strategy research (Shepherd & Rudd, 2014).

### **2.9.1 Environmental Dynamism**

Environmental dynamism is a widely explored construct in the organization theory and strategic management literature. Dynamism (often called uncertainty) is characterized by the rate of change and innovation in the industry as well as the uncertainty or unpredictability of the actions of competitors and customers (Lawrence & Lorsch, 1967). Similarly, Tegarden, Sarason, Childers, and Hatfield (2005) define environmental dynamism as technological change and the instability or unpredictability of the environment. Keats and Hitt (1988) link dynamism to the



organizational environment as strategic diversification and organizational "postures" towards innovation. These studies and others indicate the importance of the environmental dynamism construct in explaining firm-level phenomena (Miller, 1983). Similarly, the study of Idris and Momani (2013) indicates that environmental dynamism has a significant impact on organizational performance and the comprehensiveness of marketing strategy. Furthermore, Elbanna and Child (2007) propose that environmental characteristics such as uncertainty influence the rationality of the strategic decision making process.

Research has discussed in some detail the moderating role of environmental dynamism in a variety of relationships between strategic planning processes and firm performance. For example, Priem, Rasheed, and Kotulic (1995) find that the relationship between decision process rationality and firm performance is moderated by environmental dynamism. Pearce, Freeman, and Robinson (1987) suggest that the effect of strategic planning on performance is contingent upon the level of turbulence that firms face. When firms face a high dynamic, managers rely on large amounts of strategic planning to cope with changing, unpredictable conditions; while in a low dynamic environment, managers need less strategic planning (Ansoff, 1991). Similarly, Elbanna, Di Benedetto, and Gherib (2015) report evidence of the importance of environmental uncertainty in understanding the relationship between strategy process and outcomes in an Arab setting, namely, Tunisia. In addition, Fredrickson and Mitchell (1984) empirically examine the relationship between the comprehensiveness of the strategy formulation process and financial performance under varying environmental conditions. They find that in conditions of high dynamic environment, comprehensiveness did not lead to improved performance. However,

comprehensiveness was associated with performance in a relatively certain environment.

Dynamic environments intensify challenges to the firm, and often complicate these challenges. Greater analytical effort must therefore be devoted to understanding and mastering the changes. Managers must study the dynamic environments very carefully and diligently to have an adequate degree of mastery (Wilensky, 1967). Changes in strategy making behavior are every bit as important as changes in structure to cope with increased dynamism. In a highly dynamic environment, frequent changes in customer demand, technology, and business practices require firms to continuously modify their products or services to remain competitive. Brews and Purohit (2007) draw from a multinational survey of 886 firms to show that as environmental dynamism increases so does planning. Generative planning (plans encourage product, service and process innovation) and transactive planning (plans are formed iteratively on an ongoing basis and are adjusted as implementation proceeds) are more closely associated with environmental instability. Change makes current product and services obsolete and requires the development of new ones (Jansen, Van Den Bosch, & Volberda, 2006). To avoid anachronistic products and practices, innovation is critical in a dynamic environment (Lawrence & Lorsch, 1967). Likewise, sudden and unpredictable changes can reduce the value of firms' existing knowledge and even render it obsolete (Hitt, Ireland, & Lee, 2000). To minimize the threat of obsolescence, firms need to introduce an exploratory strategy and develop new products that move away from existing products, services, and markets to meet the needs of the changing environments. Firms must focus on solving new problems through new knowledge creation (Revilla, Rodriguez-Prado, & Prieto, 2008). Extreme situations of

environmental dynamism result in ‘hyper competition’, where the benefits derived from almost all forms of competitive advantage are short-lived (Bierly & Daly, 2007).

Hence, it is logical to assume that, in high dynamic environments, formulated strategic planning may be short-lived and become obsolete very quickly, since the environment is changing rapidly. Alternatively, in less dynamic markets, customer preferences and competition situation are relatively stable and, therefore, strategic planning may be more effective. In addition, environmental dynamism may pose challenges to strategy implantation and evaluation. Thus, the positive relationship between strategy implementation and performance, and the positive relationship between strategy evaluation and performance are stronger in a low dynamic environment than a high one.

Based on the above arguments, the following hypotheses are proposed for testing:

H8: Environmental dynamism moderates the relationships between strategic plan formulation, implementation and evaluation on one side and organizational performance on the other side. In detail:

H8a: Environmental dynamism moderates the relationship between strategic planning practice and organizational performance.

H8b: Environmental dynamism moderates the relationship between intensity of strategic planning and organizational performance.

H8c: Environmental dynamism moderates the relationship between comprehensiveness of strategic plan implementation and organizational performance.

H8d: Environmental dynamism moderates the relationship between alignment of strategic plan implementation and organizational performance.

H8e: Environmental dynamism moderates the relationship between accountability and organizational performance.

H8f: Environmental dynamism moderates the relationship between strategic control and organizational performance.

## **2.10 Organizational Characteristics**

Organizational characteristics can affect the nature of the relationships hypothesized above. For this reason, they must be controlled to obtain reliable results. This study uses organizational size as a control variable. The other variables, such as strategic planning age, time horizon, preparation time, and degree of foreign ownership, are included to better understand the responding firms in terms of their practice of strategic management (i.e., for the purpose of descriptive analysis)/ Below is a review of these variables.

### **2.10.1 Organizational Size**

Many suppose that organization size may systematically influence managerial strategic processes and strategic approaches (Elbanna, 2008; Elbanna & Child, 2007;

Wiesner & Millett, 2012). Organization size can affect rationality (Miller et al., 1998; Snyman & Drew, 2003), such that larger firms will employ more formal and rational processes (e.g., Papadakis, Lioukas, & Chambers, 1998). A number of studies have also found support for an association between firm size and planning process sophistication (Griggs, 2002). Kraus et al. (2006) claim that in the literature smaller enterprises do in fact plan strategically. However, Wiesner and Millett (2012) argue that there is often the perception that small and medium- sized enterprises do not engage in formal strategy making since their focus is mainly on daily operational issues. Small firms may not have the resources to have a department that is exclusively responsible for planning activities, whereas large firms can afford to do so (Gibcus & Kemp, 2003). As firms become larger they have more available resources for planning, while smaller firms have resource gaps including lack of staff, expertise and time (Matthews & Scott, 1995).

Based on these arguments, the performance and competitiveness of firms sampled in this research may be influenced by the size of each organization; thus, when discussing the relationship between strategy formulation, strategy implementation and strategy evaluation and firm performance, it is necessary to include organizational size as a control variable in the research model.

### **2.10.2 Strategic Planning Age**

The study of Elbanna (2013) shows that in the UAE, the practice of strategic management in the public sector is recent. Specifically, he finds that 77 percent of the sampled organizations developed their first strategic plan between 2007 and 2011, 20 percent of the sampled organizations developed their first strategic plan between 2002

and 2006, and only 3 percent did so before 2002. Since 2007 local and federal organizations have followed the direction of the UAE government and started to conduct strategic management practices. The mean score for the age of strategic planning in the sampled organizations was 4.2 years. It would be instructive to further understand when our sampled semi-governmental organizations developed their first strategic plan and whether the government directive has worked.

### **2.10.3 Time Horizon**

It is suggested that the time horizon is one of the aspects researchers can look at when discussing the characteristics of the strategic management practices in an organization. The time horizon refers to the time periods of organizations' strategic planning (Elbanna, 2013). In terms of planning, the time horizon gives some indication of whether the planning is short-, medium- or long-term (Stonehouse & Pemberton, 2002). Elbanna (2013) has found that the time horizons for the sampled UAE public organizations range from 1 to 5 years. The mean score for the strategic planning horizon is 4.2 years. Most organizations develop their plans for a period of either 3 years or 5 years. The time horizon for strategic planning in most federal organizations is 3 years and in most local organizations is 5 years. However, we know nothing about the planning horizon in the semi-governmental organizations of Abu Dhabi or the UAE in general, which this study addresses in Chapter 5.

Similarly, Stonehouse and Pemberton (2002) discuss the time horizon based on a survey of 159 small and medium-sized enterprises selected from both the service and manufacturing sectors in the UK. They find that for both sectors the median value of the time horizon is three years. Although a fifth of companies do plan over a five-

year time horizon, they seldom plan over a longer period. Over 70 per cent of the organizations have a planning horizon of three years or less, with over one-fifth having only a one-year planning horizon. The authors ask whether one-year planning can be classed as strategic or not.

Other researchers also indicate that there is a tendency for organizations to shorten their strategic planning time horizons (Grant, 2003). In the study of Grant (2003), all the companies reported a shortening of their planning horizons over the previous decade. Five out of the eight sampled companies had planning periods of 5 years or less. The major contraction of companies' strategy horizons resulted in shifting their emphasis from the long term to the short and medium term.

Furthermore, researchers have also discussed whether the time horizon relates to performance. Some research has found that the time horizon did not contribute to performance; however, the planning formalization has a positive and highly significant impact on performance (Kraus et al., 2006). This study further discusses the time horizons of the sampled UAE organizations to better understand the characteristics of their strategic planning.

#### **2.10.4 Preparation Time**

Preparation time and planning speed are also critical in strategic planning. Researchers have found that organizations vary in terms of the time taken over preparing strategic plans. For example, Elbanna (2013) has found that the mean score for the time taken over preparing strategic plans by his sample of public organizations in the UAE as a whole, is 5.4 months. In his study, most of the organizations, in the whole sample and the sub-samples, take either 1–4 months (36 percent–48 percent) or

5–8 months (39 percent–50 percent) to prepare their strategic plans. He does not find any big difference between federal and local organizations with regard to the length of the preparation for strategic plans.

Other researchers also discuss whether organizations should take more time to prepare strategic plans and make comprehensive decisions or whether they should make faster decisions. For example, Kahneman, Slovic, and Tversky (1982) argue that fast decision-making may produce bad decisions and bad performance if comprehensive information gathering is sacrificed to gain speed. On the contrary, Bourgeois and Eisenhardt (1988) identify a positive association between fast strategic decision-making and firm performance. Still other researchers find a positive relation between comprehensive decision processes (exhaustive and integrative) and performance in a stable environment and a negative relation between comprehensiveness and performance in an unstable environment (Fredrickson & Mitchell, 1984). Similarly, Baum and Wally (2003) have found that dynamism is significantly related to fast decision speeds, which in turn is related to improved growth. This argument is consistent with the finding that fast decision-making enhances performance in ‘high-velocity’ markets (Judge & Miller, 1991). This study further discusses the preparation time of the sampled UAE semi-governmental organizations to better understand the characteristics of their strategic planning.

#### **2.10.5 Degree of Foreign Ownership**

Previous researchers have found that ownership influences an organization’s behavior. Based on the study of the public hospital services in England, Salge (2012) finds that the level of temporal persistence in organizations’ innovative search

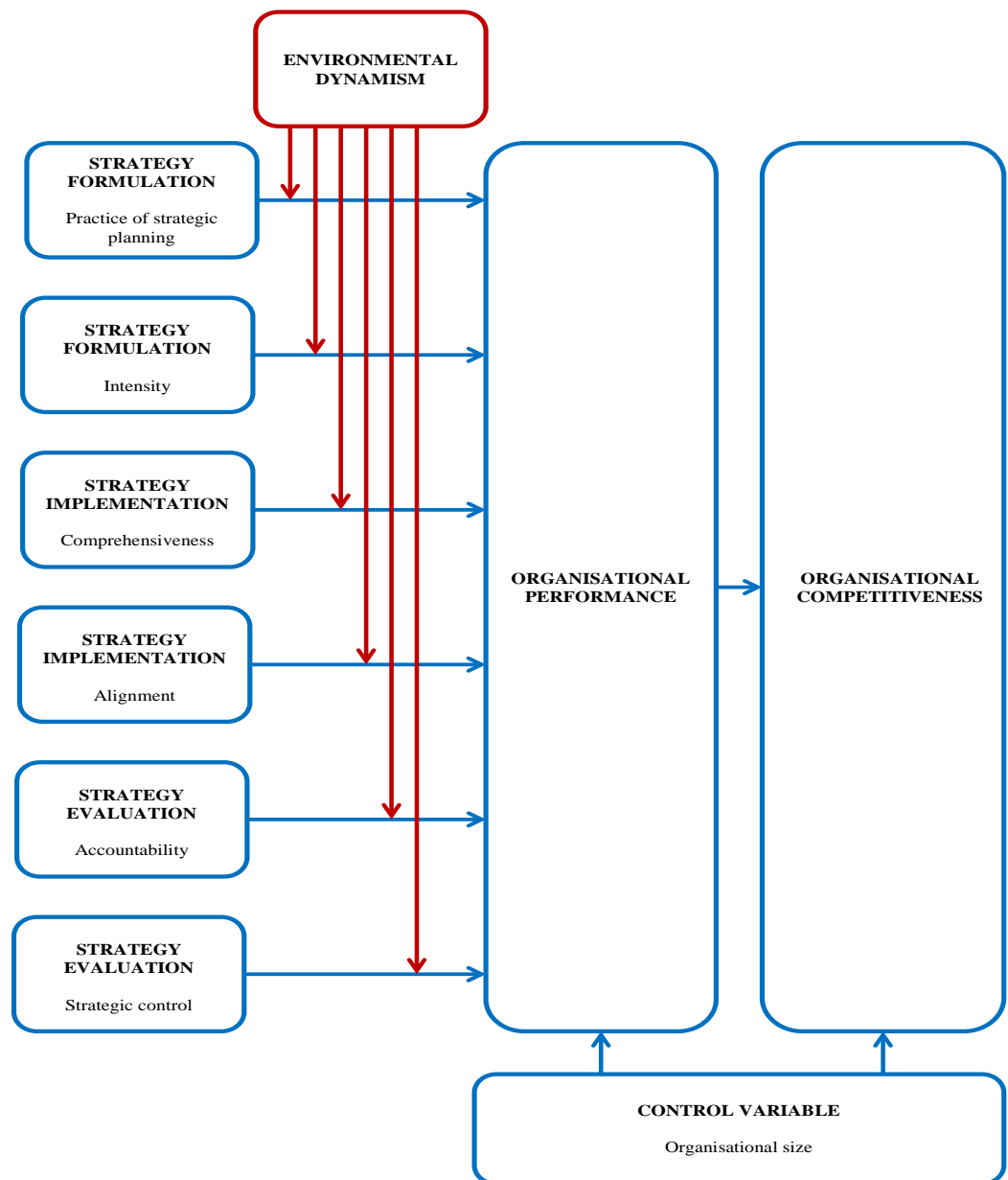


activities is determined by both structural differences in organizational size and ownership, and the slack resources of the organizations. Furthermore, Papadakis et al. (1998) find that internal firm characteristics, such as planning formality, performance, firm size and type of ownership have more significant effects on the strategy process than do environmental variables. Thus, many researchers consider the impact of ownership when discussing the impact of strategic planning on firm performance. For example, Fadol et al. (2015) control for the effect of organization size, organization age, and type of ownership when discussing the impact of the extensiveness of strategic planning on organizational performance. The type of ownership may influence who makes the strategic decision and the effectiveness of strategic planning. This study further discusses the degree of ownership of the sampled UAE semi-governmental organizations to better understand the characteristics of their strategic planning.

## **2.11 Summary of Hypotheses**

Based on the literature review discussed, the following Conceptual model (See Figure 1 below) is proposed:

Figure 1: Conceptual Model



As can be seen, in this model, the independent constructs consist of strategy formulation, strategy implementation and strategy evaluation. Organizational competitiveness is the dependent variable that is affected by organizational performance, which in turn is affected by strategy formulation, strategy implementation and strategy evaluation. Environmental dynamism moderates the relationships between the three constructs and organizational performance.

Organizational size is used in the model to control for its possible confounding effects on performance and competitiveness. In sum, the following are the hypotheses that will be tested in this study.

- H1: Practice of strategic planning (the use of strategic planning tools) is positively related to organizational performance.
- H2: Intensity of strategic planning is positively related to organizational performance.
- H3: Comprehensiveness of strategic plan implementation is positively related to organizational performance.
- H4: Alignment of strategic plan implementation is positively related to organizational performance.
- H5: Accountability is positively related to organizational performance.
- H6: Strategic control is positively related to organizational performance.
- H7: Organizational performance is positively related to organizational competitiveness.
- H8: Environmental dynamism moderates the relationships between strategic plan formulation, implementation and evaluation in one side and organizational performance on the other side. In detail:
  - H8a: Environmental dynamism moderates the relationship between strategic planning practice and organizational performance.

- H8b: Environmental dynamism moderates the relationship between intensity of strategic planning and organizational performance.
- H8c: Environmental dynamism moderates the relationship between comprehensiveness of strategic plan implementation and organizational performance.
- H8d: Environmental dynamism moderates the relationship between alignment of strategic plan implementation and organizational performance.
- H8e: Environmental dynamism moderates the relationship between accountability and organizational performance.
- H8f: Environmental dynamism moderates the relationship between strategic control and organizational performance.

The conceptual model portrayed in Figure 1 is particularly useful to managers in UAE for the following reasons. First, it links all three aspects of the strategic management process with organizational performance and organizational competitiveness. It allows managers to understand what the critical components of strategic management process are in order to have superior performance. Second, by including specific dimensions of strategy formulation, strategy implementation and strategy evaluation, this model provides managers with detailed suggestions on each component and encourages them to approach strategic management in a holistic manner in order to effectively undertake this important task. Third, this study includes environmental dynamism in the model. Environment dynamism has been discussed by many researchers due to its importance in influencing the strategic management

process, in particular strategy formulation. Given that semi-government organizations in the UAE are also constantly facing a changing competitive environment, understanding the (moderating) impact of environmental dynamism should give managers more practical guidance when making strategic decisions and implementing them in turbulent conditions.

## **2.12 Chapter Summary**

This chapter reviewed the literature on the concept and evolution of strategic management. The researcher then discussed the research on strategy formulation, strategy plan implementation and strategy evaluation. Strategy formulation has two dimensions, namely, the practice of strategic planning measured by the use of strategic planning tools and intensity. Strategy implementation was viewed as comprising two constructs, namely comprehensiveness and alignment of strategy implementation. Strategy evaluation was also reviewed with its two dimensions, namely accountability and strategic control. In addition, the relationship between each of the above-mentioned dimensions and organizational performance was reviewed. Based on the literature, the researcher concluded that further research is needed to better understand how specific dimensions of strategic management influence organizational performance. The related constructs of the study were modelled into a conceptual framework to address the existing gap identified in the literature. The environmental dynamism is hypothesized to be the moderator in the model. The following chapter discusses and describes the methodology aspects of this study.

## **Chapter 3: Methodology**

### **3.1 Introduction**

Chapter 2 examined the relevant literature in some detail and developed an integrated conceptual framework for strategic management and organizational performance. This chapter presents the research methodology. It discusses the research characteristics in terms of the research hypotheses and questions. It describes the philosophical research paradigm used in this study, before outlining the quantitative research method. Finally, the techniques and tools used in collecting the data are presented and discussed.

### **3.2 Research Questions**

This research is aimed at providing a better understanding of the processes and impacts of strategic management in the semi-government sector of Abu Dhabi, UAE.

The key research questions investigated are as follows:

1. What is the nature of the strategic plan formulation, implementation and evaluation in Abu Dhabi's semi-government sector?
2. What is the relationship between the strategic plan formulation, implementation and evaluation elements and organizational performance? Moreover, what is the impact of organizational performance on organizational competitiveness?
3. Does environmental dynamism moderate the relationship between the three areas of strategic planning and organizational performance?

### **3.3 Research Paradigm**

Research paradigms are defined as the basic belief systems that guide researchers to choose appropriate research methods (Guba, 1990). The key issues confronting paradigms are mainly related to ontology, epistemology, axiology, rhetoric and the chosen methodology (Creswell & Clark, 2011). Ontology concerns the nature of reality (e.g., whether reality is subjective or objective). It specifies what the researcher can study and make knowledge claims about (Guba & Lincoln, 1994). Epistemology is the branch of philosophy that studies the nature of knowledge in terms of its foundations, scope and validity and the process by which it is acquired (Demopoulos, 2003). Axiology covers the role of values in the research, rhetoric refers to the research language, and the chosen methodology reveals the procedures used by a researcher to determine what she or he knows (Creswell & Clark, 2011). Every paradigm is based on its own ontological and epistemological assumptions. These assumptions will influence the methods that researchers use to conduct their research. The research methods can be traced back through the methodology and epistemology, to an ontological position (Scotland, 2012). The following paragraphs discuss three common paradigms.

Among the many possible paradigms, the positivist and interpretivist types are very common in management research. Darke, Shanks, and Broadbent (1998) and Orlikowski and Baroudi (1991) suggest that the interpretivist approach is appropriate for a piece of research when the researcher acknowledges that reality is subjective and that research is not value free; research should not aim to discover repeatable patterns in the investigated phenomenon, but the research is intended to provide in-depth understanding of some phenomenon.

At the opposite extreme, the positivist paradigm, in the view of Orlikowski and Baroudi (1991), is followed when the phenomenon of interest is single, tangible and fragmental, and there can be a unique, best description of any chosen aspect of it (p. 9). In the positivist paradigm, the researcher seeks to identify a single truth that will guide action now and in the future (Robson, 1993). The fundamental principle of positivism is the ability of the researcher to make an objective analysis. Researchers seek to provide interpretations of the data in a value-free manner. Therefore, from the standpoint of positivist philosophy, the research technique used should be a highly structured methodology to facilitate both replication and quantifiable observations that lend themselves to statistical analysis (Saunders, Saunders, Lewis, & Thornhill, 2011). The positivist philosophy embraces the idea that science is founded on logic and mathematics – this provides a universal language and a formal basis for quantitative analysis (Kołakowski, 1972). In this tradition, positivists seek to break down a phenomenon into its components and then test the relationships between these components (Robson, 1993).

However, the interpretivist and positivist approaches are not mutually exclusive. Tashakkori and Teddlie (1998) argue that the contradiction between paradigms is over. They describe pragmatically oriented researchers as those who can use mixed methods in which elements of both quantitative and qualitative approaches coexist. Similarly, Venkatesh, Chan, and Thong (2012) provide a consistent view of the pragmatist paradigm: a peaceful coexistence of multiple paradigms, which is feasible in a research inquiry (p. 2). Researchers should aim to employ mixed methods research as long as they can overcome the practical challenges that may be encountered in such an attempt (Venkatesh, Brown, & Bala, 2013). Pragmatism is the paradigm providing the underlying philosophical framework for mixed-methods research



(Somekh & Lewin, 2005). The pragmatic paradigm is not committed to any one system of philosophy or reality (Mackenzie & Knipe, 2006). Early pragmatists rejected the notion that social enquiry could access the 'truth' about the real world solely by using a single scientific method (Mackenzie & Knipe, 2006). Pragmatist researchers nowadays focus on the 'what' and 'how' of the research problem; they place the research problems in the center and apply all possible approaches to understanding them (Creswell, 2003).

In this study, a positivist paradigm was chosen because the researcher believes that “knowledge is real, objective and out there in the world” and that it can be “observed, measured and quantified” objectively (Sikes, 2004; cited in Jackson, 2013, p. 50). This perspective of the researcher, along with the nature of the research and topic under investigation, dictated the adoption of a positivist approach. Such an approach ensures that the researcher can:

1. measure the elements of the study objectively (through the already established robust measures of each of the variables under investigation),
2. describe the sample in numerical terms and examine the relationships between the elements of study; and
3. reach a large enough sample to draw meaningful conclusions and generalize findings to a population.

These three benefits are the fundamental principles in the positivistic development of the research methodology in the present study.

### **3.4 Questionnaire Development and Pretesting**

#### **3.4.1 Scaling**

The survey is developed on the basis of the literature review and conceptual framework that occupied the previous chapters. It consists of six main sections: strategic plan formulation, strategic plan implementation, strategic plan evaluation, organizational performance, organizational characteristics and general information.

In measuring the items representing the theoretical constructs shown in the conceptual model, we used the multi-scaling method: some questions used the Likert Scale, and others were open-ended. Malhotra and Birks (2007) describe scaling as the process of locating the respondents on a continuum. Answers using the Likert scale are easy to elicit and administer. In addition, the format of the scale is easy for the respondent to use. Researchers have indicated that five or seven point Likert scales are normally adequate for most measures (Hinkin, 1995). The use of this scale helps to increase the response rate by minimizing the informants' time and effort. This study used five-point Likert scales.

For example, the scaling procedure for some items was a five-point Likert Scale anchored on 1 = never, and 5 = always. For other items, the five-point Likert Scale ranged from 1 = strongly disagree to 5 = strongly agree. For firm performance, the scale ranged from 1 = much worse to 5 = much better. The scale that measured the use of strategic planning tools was a five-point scale ranging from 1 = never to 5 = always. The researcher added a column to help respondents who were not familiar with any of the tools to reflect this fact, namely, 'not familiar with'. The actual scales that were used in the questionnaire are presented in Appendix A.

The following section contains detailed information on the measurement items for each construct.

#### **3.4.1.1 Strategic Plan Formulation**

This section includes questions asking about the involvement of the individuals concerned in the formulation of a strategic plan, what planning tools are used in the strategic plan and the intensity of the strategic planning.

A five-point scale was used to measure the responses for each of the strategic plan formation items. Respondents were asked to indicate the extent to which they used specific planning tools (such as gap analysis, SWOT analysis, etc.) in the formulation of their organizational strategic plans. These items were drawn from the research of Elbanna (2010, p. 34) and Aldehayyat, Al Khattab, and Anchor (2011, p. 483). In addition, the research instrument included one question with six items designed to measure the respondents' perceptions of the intensity of their organizations' strategic planning process. The items for intensity were adapted from the research of Schäffer and Willauer (2003, p. 97). Respondents were asked to indicate the level of their agreement with each statement by circling their response on a five-point scale, anchored by 1 – strongly disagree 'and 5 – strongly agree'. One of the items is reverse coded, as shown in Table 2 below, which summarizes Section A in the survey, namely, the measurement items of strategic plan formulation, their sources, and their corresponding numbers in the survey instrument distributed to the respondents.

Table 2: Strategic Plan Formulation Items

Variable	Sources	Items
Practice of Strategic Planning	Aldehayyat, Al Khattab, and Anchor (2011); Elbanna (2010)	<i>Pro forma</i> financial statements (e.g., cash flow, income statement and budget)
		Cost-benefit analysis
		Benchmarking
		Gap analysis
		Balanced scorecard
		Value chain analysis
		Spread sheet “what if” analysis
		SWOT analysis
		PEST (Political, Economic, Social and Technological) analysis
		Portfolio analysis (e.g., Boston consulting matrix or General Electric matrix or General Electric matrix)
Porter’s five forces analysis		
Intensity of Strategic Planning	Schäffer and Willauer (2003)	Everything that has to be planned is studied carefully during the process of strategic planning.
		During the process of strategic planning, we analyse each decision very carefully.
		During the process of strategic planning, many alternatives are evaluated carefully.
		Those who are involved in strategic planning analyse and evaluate projects carefully.
		Strategic planning is a very demanding process.
		Those who are involved in strategic planning spare no effort. (reverse coded)

### 3.4.1.2 Strategic Plan Implementation

Strategic plan implementation includes thirteen items that capture the comprehensiveness and alignment of the strategic plan implementation. The comprehensiveness refers to the extent to which an organization attempts to be exhaustive or inclusive in making and integrating strategic decisions (Grover & Segars, 2005). It also indicates the extent to which key organizational decision makers are inclined to use an extensive process for making decisions (Elbanna & Child, 2007; Forbes, 2005; Miller, 2008). The items for measuring comprehensiveness were adapted from the study of Hakimpoor (2014, p. 10). Alignment refers to the extent to

which organizations align their resources with the strategic plan. The items for measuring alignment are based on the study of Higgins (2005, p. 5). Higgins (2005, p. 5) proposes the Eight Ss of Successful Strategic Plan Execution, as follows: Strategic plan and Purposes, Structure, Systems and Processes, Style (leadership/management style), Staff, reSources, Shared Values (organizational culture) and Strategic Performance. The items for this study were designed to capture whether organizations aligned these eight Ss with their organizational strategic plans.

A five-point scale was used to measure the responses for each of the thirteen (13) strategic plan implementation items. Respondents were asked to indicate the extent to which they agreed or disagreed with each one of the statements in terms of the comprehensiveness and alignment of their organizations' strategic plan implementation. One (1) respondent indicated that they strongly disagreed with the statement, while five (5) respondents indicated that they strongly agreed with it. Table 3 (provided on the following page) shows the measurement items of the strategic plan implementation, their sources, and their corresponding numbers in the survey instrument distributed to the respondents.

Table 3: Strategic Plan Implementation Items

<b>Variables</b>	<b>Sources</b>	<b>Items</b>
Comprehensiveness of Strategic Plan Implementation	Hakimpoor (2014)	We use a diverse set of ideas from internal and external sources (rather than from limited internal sources) in implementing our strategic plan.
		We evaluate thoroughly each possible action before implementing our strategic plan.
		We attempt to determine optimal courses of action for how to best implement our strategic plan.

Variables	Sources	Items
		We use the experiences of managers from different management levels while implementing our strategic plan.
		We search extensively for possible implementation actions before we actually implement our strategic plan.
Alignment of Strategic Plan Implementation	Higgins (2005)	Our people have the necessary skills to implement our strategic plan effectively.
		When our people don't have the necessary skills for implementing our strategic plan, we hire new staff with the necessary skills.
		Our systems and processes (e.g., reward systems, manufacturing processes, information systems, etc.) are aligned to make our strategic plan work.
		We have a formal assignment of organizational specializations, authority, and responsibility.
		Our organizational culture (e.g., the values that are shared by organizational members) is in alignment with our strategic plan.
		The behaviors/ decisions of our managers are consistent with the requirements of our strategic plan.
		We allocate the resources (e.g., money, technology, staff, etc.) that are necessary to support our strategic plan.
		We plan and decide according to our established strategic plan.

### 3.4.1.3 Strategic Plan Evaluation

The third section in the survey was strategic plan evaluation. The aim of this section was to assess the accountability, and strategic control of the strategic plan evaluation. The measurement of accountability was based on the studies of Cavalluzzo and Ittner (2004, p. 252) and Elbanna (2013, p. 453). Strategic control has three components: premise control, implementation control, and strategic surveillance

(Schreyögg & Steinmann, 1987). Following the practice of Schreyögg and Steinmann (1987, pp. 95-98), four items were newly developed to measure these three components. All the items were worded in a way that would fully reflect the concepts of the three types of strategic control. In addition, some further explanations were included to make the questions easy to follow. For instance, the first item explains what environmental conditions are by adding “e.g., forecasts of inflation or market growth rate, etc.” Each item was measured on a 5-point scale where 1 stood for strongly disagree and 5 for strongly agree. Table 4 on the following page presents the measurement items of the strategic plan evaluation, their sources, and their corresponding numbers in the survey instrument distributed to the respondents.

Table 4: Strategic Plan Evaluation Items

<b>Variables</b>	<b>Sources</b>	
Accountability	Cavalluzzo and Ittner (2004); Elbanna (2013)	Our organization conducts regular audits/reviews of our programs/activities.
		Our organization benchmarks its performance on key indicators against comparable organizations.
		Managers at my level are held accountable for the results of their activities.
		The individual to whom I report periodically reviews my results with me.
Strategic Control	Schreyögg and teinmann (1987)	After we develop or implement our strategic plan, we engage in a systematic and continuous effort to identify if the environmental conditions (e.g., forecasts of inflation or market growth rate, etc.) forming the basis of our plan have changed so that we can update our assumptions and strategic plan.
		We focus on the accomplishment of the objectives of our strategic plan.
		Once implementation of our strategic plan has begun, we engage in a systematic and continuous effort to identify and appraise the unforeseen effects of the implemented decisions so that we can assess whether we should change our course of action.

Variables	Sources	
		During the development and implementation of our strategic plan, we engage in a systematic and continuous effort to monitor the full range of emerging events inside and outside our organization which are likely to threaten the course of our strategic action, so that we can uncover important yet unanticipated information and safeguard our strategic plan on a continuous basis.

#### 3.4.1.4 Organizational Outcomes

Organizational performance is the first dependent variable in the research model of this study. The measure of organizational performance includes both financial performance aspects (such as sales growth, market share, return on investment, etc.) and nonfinancial performance aspects (such as corporate social responsibilities, operational efficiency, customer satisfaction, etc.) We measured organizational performance through respondents' subjective assessments, using measures from the previous literature (i.e., Zuriekat, Salameh, and Alrawashdeh (2011, p.165); Vorhies and Morgan (2005, p. 92); Hart and Banbury (1994, p. 259); Ruekert, Walker, and Roering (1985, p. 20), and Child (1972, p. 18). Respondents in the present study were asked to evaluate their organization's performance, in relation to similar organizations at the present time. Statements were again to be placed on a 5-point scale, where 1 represented much worse [i.e. than before], 2 worse, 3 similar, 4 better and 5 much better. The competitiveness of the organization was evaluated, too. These items were newly developed on the lines of the study by Ruekert, Walker Jr, and Roering (1985, p. 20). Table 5 on the following page presents the measurement items of the Organizational Performance, their sources, and their corresponding numbers in the survey instrument distributed to the respondents.



Table 5: Organizational Performance

<b>Variables</b>	<b>Sources</b>	<b>Items</b>
Organizational Performance	Zuriekat, Salameh, and Alrawashdeh (2011); Vorhies and Morgan (2005); Child (1972); Hart and Banbury (1994)	Quality of products or services provided
		Development of products/services
		Employee satisfaction
		Customer satisfaction
		Sales/revenues growth
		Market share
		Return on investment
		Corporate social responsibilities
Organizational Competitiveness	Child (1972); Ruekert, Walker Jr, and Roering (1985)	Operational efficiency
		Adapting to the changes in competitors' market strategies.
		Rapid adaptation of products or services to changes in clients' needs.
		Rapid reaction to new threats in the market.
		Rapid exploitation of new market opportunities.

#### 3.4.1.5 Environmental Dynamism

Dynamism refers to the rate of change and innovation in an industry and also to customers' uncertain actions (Li & Liu, 2014). To measure environmental dynamism, the researcher used a scale developed and validated by Li and Liu (2014, p. 2798).

Table 6 presents the measurement items of the environmental characteristics, their sources, and their corresponding numbers in the survey instrument distributed to the respondents.

Table 6: Environmental Dynamism

Variables	Sources	Items
Environmental Dynamism	Li and Liu (2014)	Products or services in our industry are updated quickly.
		The acts of competitors are difficult to predict.
		The technology in our industry develops/changes quickly.
		It is difficult to predict the changes of customer needs.

### 3.4.1.6 General Information

The general information section is about the participant's role, the number of years of work in the organization; number of years in the present position; the year when the organization's first strategic plan was developed; the long-term planning horizon of the current strategic plan; the organization's main activity; number of employees; percentage of foreign ownership, etc. The background section was necessary for discovering whether or not the organization of interest had done any strategic planning and, if so, who had been responsible for it. In addition, organizational characteristics were investigated, such as slack in resources and organizational capability, measures of organization size, strategic planning age, time horizon, preparation time and degree of foreign ownership to help control for any organizational effects.

### 3.4.2 Structure and Sequencing

Questionnaires can be divided into two broad types: (1) structured questionnaires with specified alternative responses, and (2) unstructured questionnaires asking for open-ended responses (Sekaran, 2000). In this research, a

structured questionnaire was developed for greater simplicity in the administering and analysing stages and for reliability (Churchill, 1979). Closed-ended questions were used for all sections of the questionnaire, except some questions in the general information section. The closed-ended questions allowed respondents to make quick choices among several options (Sekaran, 2003), thereby reducing the time needed for completion. For questions related to general information, such as the year that the respondent's organization developed its first strategic plan, an open-ended format was applied. The questions were carefully designed with appropriate language and wording and the questions were as brief as was compatible with fulfilling the purpose of the questions. Some of them used reverse scaling, which is the use of reverse coded items on scales. This study used the reverse scaling method to reduce response bias (Papadakis & Barwise, 1998).

A five-point scale was employed in this study. The sequence of the questions was carefully considered. The closed-ended questions included the most important information and were thus located before the open-ended questions. Within the closed-ended question section, the measurement items were arranged by following the logic of the independent variables (strategic plan formulation, strategic plan implementation and strategic plan evaluation), dependent variables (organizational performance and organizational competitiveness), a control variable (organizational size), and a moderator (environmental dynamism).

### **3.4.3 Pre –Test**

Pre-testing, the last stage in the questionnaire design, is used to test the questionnaire on a small sample of respondents to identify and eliminate potential

problems with various aspects of the questionnaire to be distributed to the target companies, such as the wording of questions, response categories, etc. (Diamantopoulos, Reynolds, & Schlegelmilch, 1994; Malhotra & Birks, 2007).

Pre-testing is in line with Churchill (1979), who suggests refining the measures through asking for advice from people who are capable of understanding the nature of the concept being measured. Similarly, Campanelli (2008) suggests using domain experts to evaluate and comment on the survey design and questions before the survey instrument is finalized. Following these and similar suggestions, this study used pre-testing to evaluate the questionnaire items developed in terms of various aspects, such as:

- Were the items appropriate for the UAE context?
- Were the items easy to understand (without highly technical terminology)?
- Were any important points missing?
- Were there any unexpected difficulties/problems in collecting the data?

Obtaining responses to these and similar questions helps researchers to enhance the survey instrument by excluding and/or rephrasing some questionnaire items; and in turn establish content validity (see Chapter 3.9).

Campanelli (2008) notes that a group of three (3) to four (4) experts in addition to the researcher is an ideal number for the purpose of evaluating a survey. To benefit from expert opinions, a draft of the questionnaire, once completed, was collected from ten executives in Abu Dhabi who are experts in strategic management in their own organizations. A research assistant who is quite experienced in conducting survey research and interviewing managers distributed and collected the pre-test

questionnaires in person. During the pre-testing, participants had the opportunity to comment on each item separately and on the survey instrument as a whole.

Feedback from pre-testing was used to further revise the questionnaire, with particular regard to the interpretability of the measures, instructions and response formats. For example, some executives found that it was hard to answer the questions related to the management tools, since they were not familiar with the term “Pro forma financial statements”. Consequently, the researcher added some examples, such as cash flow, income statement and budget, in brackets to clarify what was meant. Similarly, the four items of strategic control were rewritten to better reflect three critical components: premise control, implementation control, and strategic surveillance. In addition, the scale that measured the use of strategic planning tools was a five-point scale ranging from 1 – never to 5 – always. We also added a column to help respondents who were not familiar with any of the tools to reflect this fact, namely, ‘not familiar with’. Furthermore, in the general information section, instead of asking the respondents to specify the exact number of full time and expatriate employees, the questions were designed as closed-ended questions so that respondents could estimate the range without being put under pressure to provide exact numbers.

The length of time for completion was recorded. The final questionnaire was expected to take 20-25 minutes to complete, which is suggested as a reasonable response time, avoiding fatigue and negative emotions among the respondents (Flowerdew & Martin, 2005).

After the above revisions, the actual field survey for data collection was completed using a large and representative sample, as described below.

### **3.5 Sampling**

#### **3.5.1 Unit of Analysis**

Researchers must clearly define the unit of analysis for the study (Zikmund, 2000). It indicates the level of investigation upon which the study focuses (Malhotra, Hall, Shaw, & Oppenheim, 2002). The unit of analysis also determines how a scale is treated (Hair, Anderson, Tahtam, & Black, 2006). Once the unit of analysis is determined, the research method will be developed in response. This study is looking at the influence of strategic plan formulation, strategic plan implementation and strategic plan evaluation on organizational performance and the way in which the latter influences organizational competitiveness. Hence, in line with others (e.g. Matanda & Freeman, 2009; Styles, 1998), a single semi-government organization was chosen as the unit of analysis. In other words, our unit of analysis was the organization.

Organizations can be classified as pure government, quasi organizations (semi-government) and purely private organization. According to Moe (2001) the second category (quasi or semi-government) consists of state owned corporations, business enterprises or public sector undertakings created for the purpose of commercial activities by the government itself. Semi-government organizations can also be independent governmental corporations formed by the government to perform a set of public functions or a particular service (Osborne & Gaebler, 1992). This study chose to adopt Moe's definition of a semi-government organization.

### **3.5.2 Key Informants**

In organizational research, a single-key informant approach is the most commonly used method to collect data (Kumar, Stern, & Anderson, 1993). In the present study, we also used the single-key informant approach. The key informant was a senior executive in a firm, such as a chief executive officer (CEO), president, managing director, or senior manager. The senior executives were chosen if they met certain criteria. First, they could be considered the most appropriate respondents due to their broad knowledge of the organizations' strategic activities. They would be the ideal person from whom to elicit information about the organization's strategies. Second, they have considerable knowledge of the specific activities of the firm and much experience with strategic management in general. Generally, it is the senior executives who make the key strategic plans.

### **3.5.3 Sampling Technique**

To identify the target population (i.e., semi-government organizations) for distributing the questionnaire, several databases were used, e.g., the UAE government website and databases from other websites (i.e. <https://www.abudhabi.ae>). We needed the list of semi-government organizations that these websites provided because, to our best knowledge, there is no database that lists all the semi-government organizations in the UAE.

The final list contained two hundred and ten (210) semi-government organizations, which represent most of the semi government organizations in Abu Dhabi, as far as we can tell from our observation as a high-level manager of a semi-government organization and from talking to colleagues in other such organizations.

All organizations included in the sample were targeted in the present study. All questionnaires altogether were distributed and one-hundred and eighty-two (182) completed questionnaires were collected and included in the analysis, representing a response rate of 86.6 % (182/210). The responding organizations included semi-government organizations in a range of industries. Such variety is representative of the semi-government organizations in Abu Dhabi.

The study limited its population to semi-government organization in Abu Dhabi, for two main reasons. First, organizations' resources and strategic plans in the UAE might vary from one emirate to another; thus, we might need to control for the unknown effects of emirate (Elbanna, 2013). Second, Abu Dhabi is the capital city of the UAE and is also one of the two main centers of business and economic activity in UAE; the other is Dubai. Examples of the semi-government organizations in Abu Dhabi are ADNOC and its group of companies, Mubadala and its group of companies, Abu Dhabi Water and Electricity and its group of companies, Abu Dhabi National Hotels, the Cleveland Clinic in Abu Dhabi, the Diabetes Centre of Imperial College, London (ICLDC), Musanada, Al Yah Satellite communication company (Yahsat), Abu Dhabi Finance, Emirates Aluminium (EMAL), Dolphin Energy, Emirates LNG, Tabreed National Central Cooling Company in Al Dar, Emirates Ships Investment Company, Abu Dhabi Ports Company, Advance Military Maintenance Company (AMROC), Injazat company, etc.

As is made clear throughout, this study uses path analysis, a special case of structural equation modeling (SEM) analysis, to test its hypotheses. While SEM is used to evaluate a model with both observed variables (indicators) and unobserved (latent) variables, path analysis is used to evaluate models with only observed variables



(Garson, 2012) cited in Elbanna, Thanos, & Colak (2014). SEM analysis requires a larger sample size than path analysis does. The sample size of this study is 182; given that a sample size of 100-200 is considered an acceptable (medium) sample size (Kline, 2015), path analysis is preferred to SEM analysis here to avoid the invalid estimations that SEM might have produced with a sample size of 182 (Nasser & Takahashi, 2003), cited in Elbanna et al. (2014).

### **3.6 Data Collection Procedures**

This study used the drop off and pick up method in collecting data since it is widely and successfully used in the Arab Middle East in general and the UAE in particular (Elbanna, 2012). The respondents were notified by telephone and email about the forthcoming survey before the questionnaires were made available. This method is suggested for the sake of maximizing the response rate (Sekaran, 2003). The questionnaire that followed was accompanied by a cover letter.

The cover letter contained a statement of the research purpose and of the importance of the organization's participation, together with a promise that a summary of the findings would be provided to participating organizations and that research confidentiality would be maintained (see Appendix A).

The questionnaire was personally delivered by a trained research assistant. We gave him some training in collecting the completed sheets. When distributing the questionnaires, this trained researcher was able to offer guidelines to the respondents, stressing the value of their cooperation and the benefits they could obtain by taking part. After one week of distributing the survey instruments, a follow up call was made to the participating organizations. Then, after another week, the questionnaires were

personally collected by the research assistant. The whole process of data collection, including training the research assistant, was carried out between August 15, 2105 and November 15, 2015.

### **3.7 Ethical Considerations**

The survey and explanatory statements are all in English. The explanatory statements were prepared to give the participants in-depth information about the aims and objectives of the research; how their contact details were obtained; how the privacy of their personal and organizational information would be assured; the importance of completing all the questions even if they looked similar; and the promise to send a copy of the report to anyone interested in the research result (see Appendix A for the explanatory statements and survey).

In order to improve the response rate, this study tried to ensure that the respondents had little concern over the confidentiality of the survey, including the following in the explanatory statement.

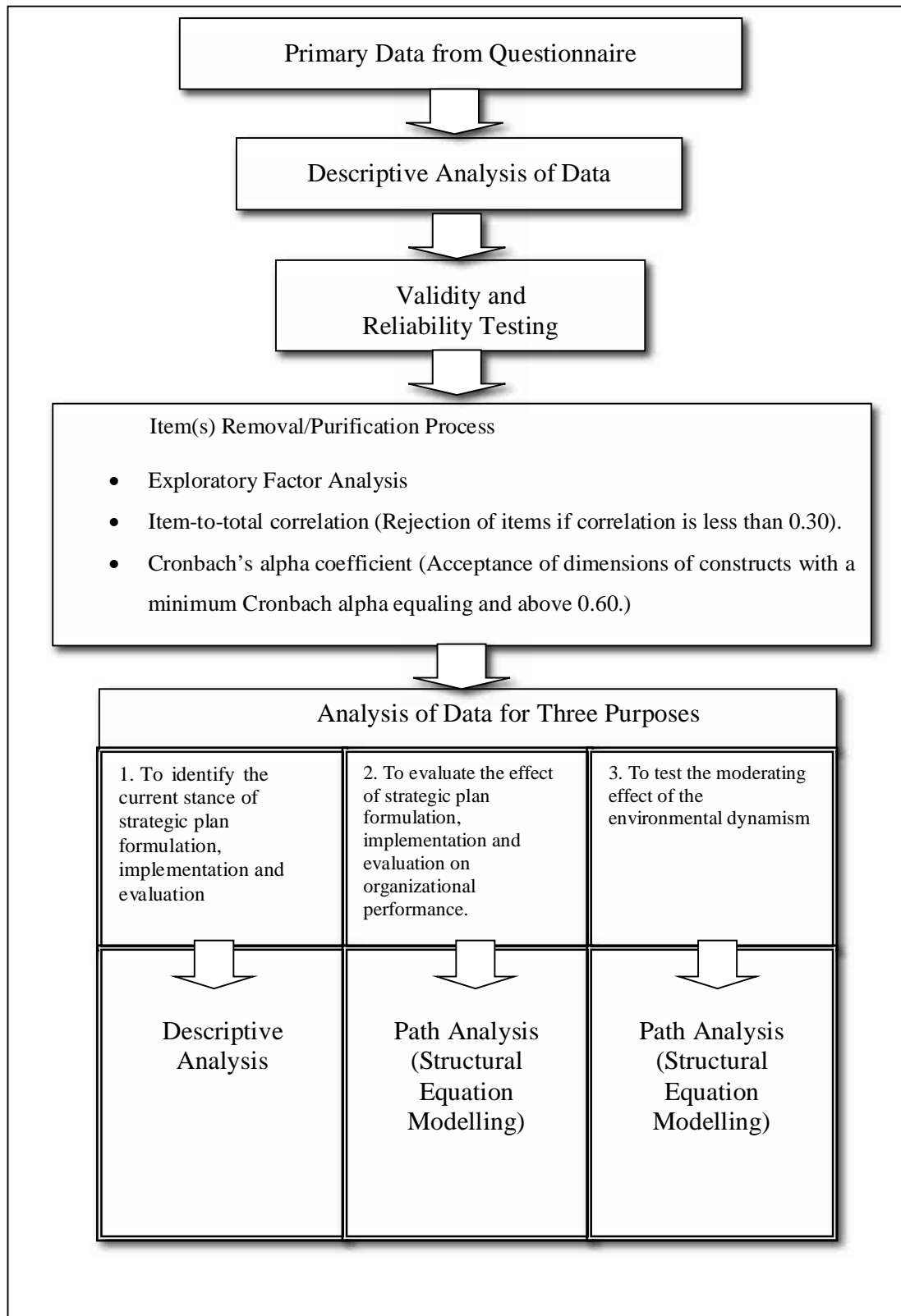
“Please be assured that your responses will be kept strictly confidential. Only aggregated results will be reported, with no references made to individual responses, respondents, or companies.”

### **3.8 The Analysis Process**

The flow-chart (Figure 2 on the next page) provides an overview of the way in which the analysis processes were carried out in the present study. A sequence of steps was followed in developing the scale. It involves a number of exploratory factor

analyses and examines the internal reliability of the data set using item-to-total correlations and Cronbach's alpha coefficients. Items which fulfilled all requirements in the exploratory factor analysis were then submitted to a reliability analysis to measure the item-total correlations and Cronbach's alpha before using them in further analysis. This procedure was undertaken to sustain the reliability and validity of the data. Then, as indicated above, structural equation modelling (path analysis) was used to test the hypotheses.

Figure 2: Model of the Data Analysis Process



The data analysis in this study has three main objectives:

1. To identify the current stance of strategic plan formulation, implementation and evaluation.
2. To evaluate the effect of strategic plan formulation, implementation and evaluation on organizational performance and the impact of the latter on organizational competitiveness.
3. To test the moderating effect of environmental dynamism on the relationship between strategic plan formulation, implementation and evaluation, and organizational performance.

### **3.9 Data Analysis Method**

The data were subjected to a range of statistical analyses, designed to address the following research objectives: a) examine the relationship between strategic plan formulation, strategic plan implementation, strategic plan evaluation and organizational performance; and b) identify how environmental characteristics moderate these relationships. The data analysis proceeded as follows.

More detailed information about the reliability and validity, structural equation modeling analysis and moderation analysis is given in the following section.

#### **3.9.1 Reliability and Validity**

##### **3.9.1.1 Reliability**

Reliability is defined as “the amount of agreement between independent attempts to measure the same theoretical concept” (Bagozzi & Heatherton, 1994, p.

17). Reliability has two different meanings, referring to (1) the scale's internal consistency; and (2) its stability over time. Since this study uses cross-sectional data, only the reliability of the scale's internal consistency was tested. Internal consistency reliability refers to the degree to which the items jointly measure the same construct (Henson, 2001).

To assess the reliability of the scales used in this study, item-to-total correlations and Cronbach's (1951) coefficient alpha (Henson, 2001) were calculated. The latter indicates the internal consistency of a scale. An item-to-total correlation of 0.30 and above is considered enough for an item to have high reliability (Cooper & Emory, 1995). The value of 0.60 is recommended as the minimum level of Cronbach's alpha. If an item's Alpha is less than 0.6, it is recommended to remove the item. To prepare the constructs for these procedures of reliability assessment and also establish their validity, exploratory factor analysis was used (see Chapter 4). It should also be noted at this point that the validity of the scales was also assessed by confirmatory factor analysis (see Chapter 5). Certain requirements had to be fulfilled before factor analysis could be successfully employed. One of the important requirements was to measure the variables by using interval scales. Using a 5-point Likert scale in the survey questionnaire fulfilled this requirement. A number of reasons account for this use of Likert scales. First, they communicate interval properties to the respondent, and therefore produce data that can be assumed to be interval-scaled (Madsen, 1989; Schertzer and Kernan, 1985). Second, in the strategic management literature, Likert scales are almost always treated as interval scales (see for example, Aaker et al., 1995; Bagozzi, 1994; Kohli and Jaworski, 1990; Nerver and Slater, 1990; Tansuhaj et al., 1989).

Another important requirement is that the sample size should be more than 100; a researcher generally cannot use factor analysis with fewer than 50 observations (Hair et al., 1998). Bartlett's Test of Sphericity and the Kaiser-Meyer-Olkin Measure of Sampling Adequacy were used to assess if the sample size was enough to carry out exploratory factor analysis.

Factor extraction results using Principal Component Analysis (PCA) are given in the tables in Chapter 4. It should be noted that an eigenvalue of 1.0 is used as the benchmark in deciding the number of factors (Hair et al., 1998; Norusis, 1993). The Varimax technique for rotated component analysis was used with a cut-off point for interpreting the factors at 0.40 or greater.

### **3.9.1.2 Validity**

Validity refers to *“a process of accumulating evidence to support inferences”* (American Psychological Association, 1985, p. 9). There are three types of validity check, namely, checks of content, construct and criterion validity (Malhotra et al., 2002).

Content validity measures *“the degree to which the content of the items adequately represents the universe of all relevant items under study”* (Cooper & Schindler, 2001, p. 211). This study tried to maximize content validity as follows. First, the items used in this research were adopted/adapted from the relevant literature. Previous researchers had validated these items. The newly developed items (i.e., four items for strategic control and four items for organizational competitiveness) were also based on the current literature (Ruekert et al., 1985; Schreyögg & Steinmann, 1987) and were carefully worded. Once the final pool of scale items had been generated,

content validity was then assessed by four academics familiar with the strategic management literature. This is consistent with prior research (Cooper & Schindler, 2001, p. 211; Narver & Slater, 1990). Each person worked independently and assessed the statements of each variable for clarity and relevance. Their task was to identify any overlapping, ambiguous or irrelevant items and to assess whether the scale items generated captured the nuances of the brand orientation construct and the salient activities associated with managing brand identity, architecture, communications and value. Second, the survey instrument was pre-tested with senior executives who are experts in strategic management in their respective organizations. These managers further checked the questionnaire items.

Construct validity is defined as the extent to which an instrument measures the concept that it aims to measure (Churchill & Iacobucci, 2002). Campbell and Fiske (1959) proposed two aspects of construct validity: convergent and discriminant validity. Convergent validity refers to “the degree to which multiple attempts to measure the same concept are in agreement” (Bagozzi, Yi, & Phillips, 1991, p. 423). Thus, the items that are indicators of a specific construct should converge or share a high proportion of variance (Campbell & Fiske, 1959; Hair et al., 2006). Discriminant validity involves demonstrating whether a construct can be differentiated from other constructs that may be somewhat similar (Malhotra et al., 2002). This study used exploratory (see Chapter 4) and confirmatory factor analysis (see Chapter 5) to test both convergent and discriminant validity. The underlying premise was that items purporting to measure distinct constructs should not load onto the same factors when subjected to factor analysis.



Criterion-related validity refers to the extent to which one measure estimates or predicts the values of another measure or quality (Reynolds & Fletcher-Janzen, 2007). There are two types of criterion-related validity: predictive validity and concurrent validity. The main difference between these two types is the time when predictor and criterion data are collected. In this study, since all the data were collected at the same time, only concurrent validity was assessed. Concurrent validity can be assessed by checking the correlation between the measuring instrument and the criterion variable. When the correlation is high, the instruments are considered to have criterion validity (Churchill & Iacobucci, 2002).

### **3.9.2 Structural Equation Modelling**

As indicated earlier, this study used path analysis, a type of structural equation modelling (SEM) technique, via the AMOS 22 software package, to test the hypotheses posited. The factor means were employed as single item indicators to perform path analysis, applying the maximum likelihood estimates (MLE) method, following the guidelines suggested by Joreskog & Sorbom (1982).

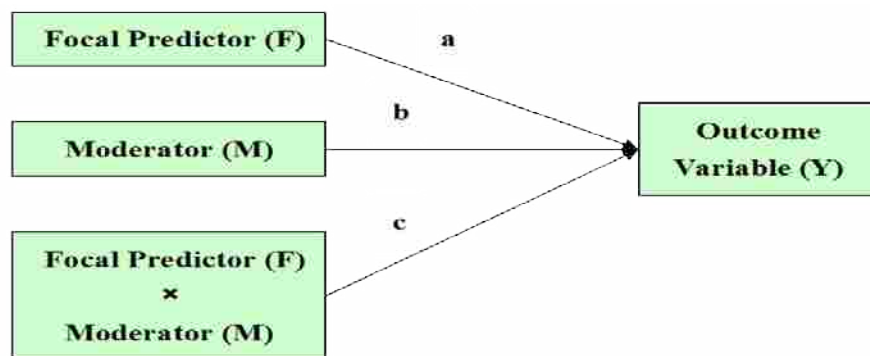
### **3.9.3 Moderation Analysis**

In this study, we also examined the moderating effects of environmental dynamism on the relationships between strategic plan formulation, strategic plan implementation, strategic plan evaluation and organizational performance.

A moderator is a variable that influences the direction and/or strength of the relationship between an independent variable and a dependent variable (Baron & Kenny, 1986). Figure 3 below illustrates a moderator model.

The model has three causal paths that feed into the outcome variable: the impact of the focal predictor (Path a); the impact of the moderator (Path b), and their interaction (Path c). The moderating effect is supported if the interaction (Path c) is significant. Although the main effects of the focal predictor and moderator (Paths a and b) could be significant, they are not directly relevant conceptually to examining the moderating effects (Baron & Kenny, 1986).

Figure 3: Moderator Model



Source: based on (Baron & Kenny, 1986).

To evaluate the moderating effect of environmental dynamism, we used the methodology of Zhao and Cavusgil (2006), who suggested a two-group model approach. The sample was split into two groups according to the mean score of the environmental characteristics of the participating companies. The data above the mean (3) were defined as high and supportive environmental characteristics, and the data below the mean as low in environmental support. A two group AMOS model was used later in order to determine whether or not there was any significant difference between the structural parameters of the high environmental characteristics group and those of the low environmental characteristics group. In the first analysis, the parameter from the environmental characteristics was constrained to be equal. In the second, the

parameter was kept free (not constrained). Differences in the T values between the two models determined whether the degree of environmental characteristics had a moderating effect on the relationship between the strategic planning processes and company performance. The T statistic was calculated according to the following equations (Cohen, 1983):

$$T = \frac{path\_high - path\_low}{SP \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

$$SP = \sqrt{\frac{(n_1 - 1)^2 (S.E_1)^2 + (n_2 - 1)^2 (S.E_2)^2}{n_1 + n_2 - 2}}$$

SP: pooled standard deviation

### 3.9.4 Handling the Missing Data

This part presents some popular methods of treating missing data, including the method chosen for this study. There are two conventional methods of dealing with missing data: first, case deletion, which eliminates all questionnaires with missing data and analyzes the data disadvantages: 1) it significantly decreases the number of cases available for analysis; and 2) data are not always missing entirely at random. This method biases the data distribution and statistical analysis (Briggs et al.,2003). The second method is the imputation method, which replaces each missing value with a reasonable guess, and then carries out the analysis as if no values were missing. With this method, the calculated means of the non-missing values are used to impute the missing values.

The imputation method is one of the most commonly used methods (Allison, 2001; Edgar, 2004; Briggs et al., 2003). Therefore, it seems prudent to replace the missing data for a given feature in this study by the mean of all the known values of this attribute that pertain to the instance with the missing feature. Appendix (B) includes a table which summarizes the numbers of the missing data.

### **3.10 Chapter Summary**

This chapter described the research paradigm and methodology. Scale items were generated on the basis of the current literature. The discussion then turned to the research design employed in this study and the sampling methodology adopted. Samples were drawn from both government databases and other websites. Due to the risk of a low response rate if we asked senior executives to participate in the survey via postal mail, this study used the drop off and pick up method to collect its data. Reliability and validity tests were conducted. Structural equation modeling was used to test the hypotheses concerned with strategic plan formulation, strategic plan implementation, strategic plan evaluation and organizational performance and between the latter and organizational competitiveness. Moderation analysis was used to identify how environmental dynamism moderates the relationships between strategic planning elements and organizational performance. The following chapter further discusses the data analysis procedures and results.

## **Chapter 4: Purification of Measures and Descriptive Analysis**

### **4.1 Introduction**

This chapter is concerned to analyze the reliability and validity of the research measures and make a descriptive analysis of the sampled organisations and respondents. First, the data were edited, coded and entered on SPSS. Second, the descriptive analysis of the data provided some qualitative insights in investigating, describing and discussing the data obtained in terms of their value and contribution to the aims of the research. Third, as part of the process of purifying the measuring instruments, Cronbach's alpha was used as an indicator of the reliability of the scale measurement. Content validity was considered and factor analysis was used to examine it. Finally, the sampled organisations and respondents were descriptively analysed. It should be noted that this chapter is restricted to the purification analysis of the collected data and the presentation of the descriptive analysis of the sampled organisations and respondents.

### **4.2 Data Preparation and Purification of Measures, and Reliability Analysis**

The first step in preparing the data for analysis was the process of data editing, coding and entering on SPSS. First, the raw data were edited for the purpose of detecting any errors and omissions, correcting them where possible, and certifying that the relevant data quality standards had been met. Second, the study variables were coded into formats for the statistical Package for the Social Sciences (SPSS) version 22 that was used in the data analysis. Each variable was given a unique label. This step helped in setting up the computer software to analyse the data. Then SPSS was used to enter the data. Each questionnaire received was first checked for errors and

omissions, before the answers were entered manually into the computer and the data became ready for analysis.

According to Nachmias and Nachmias (1996), after collecting the data, researchers must follow certain steps in order to obtain meaningful results from the analysis stage. This section discusses these steps in detail.

After the entry and recording processes had been completed, all the measures were purified by assessing their reliability and validity. There are a number of reasons for emphasising the reliability and validity of the measurements. One, a reliable and valid measuring instrument enhances the methodological rigour of the research; two, it permits a co-operative research effort and provides support for the triangulation of results; and three, it provides a more meaningful explanation of the phenomena that are being investigated (Hair et al., 2006).

In this study the reliability was measured using item-to-total correlation. The aim was to remove items if they had low correlation unless they represented an additional domain of interest. This method is considered the most common procedure used by researchers for guaranteeing the reliability of a multi-item scale (May, 1997). The purpose of the item-to-total correlation measure is to determine the relationship of a particular item to the rest of the items in the same dimension. The process helps to ensure that the items making up the dimension share a common core (May, 1997). In this purification process, each item to be retained for further analysis should have an item-to-total correlation score of 0.30 or above and would then be considered highly reliable (Cooper and Emory, 1995).

Additionally, the estimation of reliability was also made on the basis of the average correlation among items within a dimension, which is a matter of “internal consistency” (Nunnally, 1978). The basic formula for determining the reliability on the basis of this internal consistency is called the coefficient alpha (Cronbach’s alpha). This technique has proved to be a good estimate of reliability in most research situations. Nunnally (1978) suggests that a reliability of 0.60 would be sufficient.

The following section reports the results of the reliability analyses which were conducted for all the measuring instruments in the questionnaire, namely, strategic planning formulation, strategic planning implementation, strategic planning evaluation, environmental dynamism, and organizational performance factors (Reliability Analysis).

Computing the item-to-total correlation and also testing with coefficient alpha constitutes the process of analysing reliability. Item-to-total correlation and the Cronbach Alpha coefficient are observed to be very popular in the field of social science research (Price and Muller, 1986).

All the items were found to have a high item-to-total correlation, above the acceptable level of 0.30. As shown in the last column of Table 7, below, the reliability coefficients ranged from 0.83 to 0.93 which were significantly higher than the acceptable level of 0.60 (Nunnally 1978). These results confirm that reliable scales were used.

This study calculates the reliability for every single variable. Table 7 shows the reliability coefficient and item-total correlations for all the study constructs.

Table 7: Reliability Analysis for the Research Variables

Item	Item	Item-total correlation	Cronbach's
<b>A</b>	<b>STRATEGIC PLAN FORMULATION</b>		
	<b>Practice of strategic planning</b>		<b>0.83</b>
<b>Q1</b>	<b>Please tell us how often the following tools are used in developing your strategic plans?</b>		
1.1	Pro forma financial statements (e.g., cash flow, income statement and budget)	0.44	
1.2	Cost-benefit analysis	0.64	
1.3	Benchmarking	0.59	
1.4	Gap analysis	0.50	
1.5	Balanced scorecard	0.41	
1.6	Value chain analysis	0.45	
1.7	Spreadsheet “what if” analysis	0.54	
1.8	SWOT analysis	0.58	
1.9	PEST (Political, Economic, Social and Technological) analysis	0.57	
1.10	Portfolio analysis (e.g., Boston consulting matrix or General Electric matrix)	0.67	
1.11	Porter’s five forces analysis	0.60	
	<b>Intensity of strategic planning</b>		<b>0.89</b>
<b>Q2</b>	<b>To what extent do you agree or disagree with each of the following statements about the strategic planning process in your organization?</b>		
2.1	Everything that has to be planned is studied carefully during the process of strategic planning.	0.61	
2.2	During the process of strategic planning, we analyse each decision very carefully.	0.80	



Item	Item	Item-total correlation	Cronbach's
2.3	During the process of strategic planning, many alternatives are evaluated carefully.	0.77	
2.4	Those who are involved in strategic planning analyse and evaluate projects carefully.	0.76	
2.5	Strategic planning is a very demanding process.	0.72	
2.6	Those who are involved in strategic planning spare no effort.	0.68	
<b>B</b>	<b>STRATEGY IMPLEMENTATION</b>		
	<b>Comprehensiveness of strategic plan implementation</b>		<b>0.92</b>
<b>Q3</b>	<b>To what extent do you agree or disagree with each of the following statements to best describe the current situation of strategic plan implementation at your organization?</b>		
3.1	We use a diverse set of ideas from internal and external sources (rather than from limited internal sources) in implementing our strategic plan.	0.77	
3.2	We evaluate thoroughly each possible action before implementing our strategic plan.	0.65	
3.3	We attempt to determine optimal courses of action for implementing our strategic plan.	0.86	
3.4	We use the experiences of managers from different management levels while implementing our strategic plan.	0.76	
3.5	We search extensively for possible implementation actions before we actually implement our strategic plan.	0.87	
	<b>Alignment of strategy plan implementation</b>		<b>0.90</b>
<b>Q4</b>	<b>Please identify to what extent you agree or disagree with each one of the following</b>		

Item	Item	Item-total correlation	Cronbach's
	<b>statements in relation to the current situation within your organization.</b>		
4.1	Our people have the necessary skills to implement our strategic plan effectively.	0.78	
4.2	When our people don't have the necessary skills for implementing our strategic plan, we hire new staff with the necessary skills.	0.60	
4.3	Our systems and processes (e.g., reward systems, manufacturing processes, information systems, etc.) are aligned to make our strategic plan work.	0.66	
4.4	We have formal assignment of organizational specializations, authority and responsibility.	0.58	
4.5	Our organizational culture (e.g., the values that are shared by employees) is in alignment with our strategic plan.	0.71	
4.6	The behaviours/decisions of our managers are consistent with the requirements of our strategic plan.	0.78	
4.7	We allocate the resources (e.g., money, technology, staff, etc.) that are necessary to support our strategic plan.	0.70	
4.8	We plan and decide according to our established strategic plan.	0.82	
<b>C</b>	<b>STRATEGY EVALUATION</b>		
	<b>Accountability</b>		<b>0.85</b>
<b>Q5</b>	<b>To what extent do you agree or disagree with each of the following statements regarding the managerial accountability practices in your organization?</b>		
5.1	Our organization conducts regular audits/reviews of our programs/activities.	0.74	

<b>Item</b>	<b>Item</b>	<b>Item-total correlation</b>	<b>Cronbach's</b>
5.2	Our organization benchmarks its performance on key indicators against comparable organizations.	0.73	
5.3	Managers at my level are held accountable for the results of their activities.	0.63	
5.4	The individual to whom I report periodically reviews my results with me.	0.64	
	<b>Strategic control</b>		<b>0.89</b>
<b>Q6</b>	<b>To what extent do you agree or disagree with each one of the following statements that best describe strategic plan evaluation at your organization?</b>		
6.1	After we develop and implement our strategic plan, we engage in a systematic and continuous effort to identify whether the environmental conditions (e.g., forecasts of inflation or market growth rate, etc.) forming the bases of our plan have changed so that we can update our assumptions and strategic plan.	0.74	
6.2	We focus on the accomplishment of the objectives of our strategic plan.	0.70	
6.3	Once implementation of our strategic plan has begun, we engage in a systematic and continuous effort to identify and appraise the unforeseen effects of the implemented decisions so that we can assess whether we should change our course of action.	0.77	
6.4	During the development and implementation of our strategic plan, we engage in a systematic and continuous effort to monitor the full range of emerging events inside and outside our organization which are likely to threaten the course of our strategic action, so that we can uncover important yet unanticipated information and safeguard our strategic plan on a continuous basis.	0.82	

Item	Item	Item-total correlation	Cronbach's
<b>C</b>	<b>ENVIRONMENTAL CHARACTERISTICS</b>		
	<b>Environmental dynamism</b>		<b>0.93</b>
<b>Q7</b>	<b>To what extent do you agree or disagree with each of the following statements regarding your industry?</b>		
7.1	Products or services in our industry are updated quickly.	0.86	
7.2	The acts of our competitors are difficult to predict.	0.86	
7.3	The technology in our industry develops/ changes quickly.	0.80	
7.4	It is difficult to predict the changes in customer needs.	0.84	
<b>D</b>	<b>5. ORGANIZATIONAL OUTCOMES</b>		
	<b>7. Organizational performance</b>		<b>0.90</b>
<b>Q8</b>	<b>8. Relative to similar organizations at the present time, how do you rate your organization's performance in each of the following dimensions?</b>		
8.1	Quality of products or services provided	0.79	
8.2	Development of products/services	0.84	
8.3	Employee satisfaction	0.74	
8.4	Customer satisfaction	0.81	
8.5	Sales/ revenues growth	0.87	
8.6	Market share	0.83	
8.7	Return on investment	0.83	
8.8	Social responsibilities	0.74	

Item	Item	Item-total correlation	Cronbach's
8.9	Operational efficiency	0.76	
	<b>9. Organizational competitiveness</b>		<b>0.93</b>
<b>Q9</b>	<b>10. To what extent is your organization able to attain each of the following?</b>		
9.1	Adapting to the changes in competitors' market strategies.	0.88	
9.2	Rapid adaptation of products or services to changes in clients' needs.	0.85	
9.3	Rapid reaction to new threats in the market.	0.79	
9.4	Rapid exploitation of new market opportunities.	0.83	

### 4.3 Content Validity

Content validity is the degree to which the domain of properties or characteristics of a construct that one desires to measure are in fact captured by the measures (Bagozzi, 1994). A measure has content validity if there is general agreement among the subjects and researchers that the instrument has measurement items that cover all the content domain of the variables being measured (Nunnally and Bernstein, 1994). Researchers can satisfy content validity through careful definition of the research problem, the items to be scaled, and the scale to be used. This logical process is somewhat intuitive and is unique to each researcher (Emory and Cooper, 1991). However, the measurement scale must satisfy certain criteria before it can be applied in empirical work.

The criteria which we tried to consider in this study include (McDaniel and Gates, 1996):

- Carefully defining what is to be measured.
- Conducting a careful literature review and interviews with the target population before collecting our data.
- Letting the scale be checked by experts.
- Making sure that the scales could be pre-tested.
- Carefully selecting our scales from related research which has been tested and validated by other researchers.

As discussed earlier, all the variables listed in the survey that we made were identified by a comprehensive review of the related literature. The variables list was also validated by several interviews with strategic planning experts and a pilot study. This process guaranteed that content validity had been achieved in the survey.

#### **4.3.1 Construct Validity and Scale Development**

This section reports the test of construct validity and scale development for the variables included in this study. As mentioned earlier (Part 3.9), a sequence of steps was followed through the scale development process, which involved a number of exploratory factor analyses and examination of the internal reliability of the data set using item-to-total correlations and Cronbach's alpha coefficients. Items which fulfilled all the requirements in the exploratory factor analysis were then submitted to a reliability analysis to calculate the item-total correlations and Cronbach's alpha values, the results of which are reported in Table 7, above. This type of procedure was undertaken to sustain the reliability and validity of the data. Bearing in mind the great

number of items in our study (55), along with our sample size ( $N = 182$ ), which violates the assumption of the recommended six-to-one ratio for obtaining stable factor solutions (Bauer et al., 2001), we ran several sets of factor analysis (e.g., Hart & Banbury, 1994). This also has been a practice followed by many researchers in the strategic management field (see for example Bauer, Truxillo, Sanchez, Craig, Ferrara, and Campion, 2001) and Elbanna and Child, 2007).

### **4.3.2 Strategic Plan Formulation Variables**

On the basis of the literature review, we measured our two variables of strategy formulation (see Chapter 3 for more information on the sources of these variables). These two variables are the practice of strategic planning and the intensity of strategic planning. However, to validate the two constructs, the different items included were submitted to factor analysis. The results are reported below.

#### **4.3.2.1 Results of Factor Analysis**

Certain requirements need to be fulfilled before factor analysis can be successfully employed. One of the important requirements is to measure the variables by using interval scales. Using a 5-point Likert scale in the survey questionnaire fulfilled this requirement. This use of Likert scales can be justified as follows. First, they communicate interval properties to the respondent, and therefore produce data that can be assumed to be interval scaled (Madsen, 1989; Schertzer and Kernan, 1985). Second, in the strategic management literature Likert scales are almost always treated as interval scales (see, for example, Aaker et al., 1995; Bagozzi, 1994; Kohli and Jaworski, 1990; Nerver and Slater, 1990; Tansuhaj et al, 1989). Third, the sample size

should be more than 100 since researchers generally cannot use factor analysis with fewer than 50 observations (Hair et al., 1998). This requirement has also been fulfilled, because 182 respondents took part in this research. The results of the factor analysis tests are briefly discussed below.

#### **4.3.2.1.1 Bartlett's Test of Sphericity**

Since the first dimension of the strategy formulation was directed to find what the current practice of the strategic plan formulation is in Abu Dhabi's semi-government sector, the 17 items were submitted to factor analysis. The results of Exploratory Factor Analysis (EFA) yielded a two-factor solution that accounted for 54.02 % of the variance extracted. The result for Bartlett's Test of Sphericity (BTS) was high, at 1921.90, and the associated significance value was very low ( $p=0.00$ ). This shows that the data were appropriate for factor analysis (Snedecor and Cochran, 1989).

#### **4.3.2.1.2 Kaiser-Meyer-Olkin Measure of Sampling Adequacy**

The Kaiser-Meyer-Olkin (KMO) measurement of sample adequacy (MSA) gives the computed KMO as 0.88, which is adequate, and above the acceptable level (Snedecor and Cochran, 1989) (see Table 8).



Table 8: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.88
	Approx. Chi-Square	1921.90
Bartlett's Test of Sphericity	df	136
	Sig.	0.00

Source: Analysis of survey data

As the above requirements were met, we concluded that factor analysis was appropriate for this data set and allowed the procedures for factor analysis to be performed.

#### 4.3.2.2 Results of Principal Component Analysis Extraction Process

The factor extraction results using Principal Component Analysis (PCA) are given in Table 9. An eigenvalue is the standard variability in the total data set (equal to the numbers of variables included), which is accounted for by an extracted factor in factor analysis.

The Kaiser-Meyer-Olkin method proposed by Kaiser (1960) is perhaps the best known and most often adopted in practice (Fabrigar et. al, 1999). According to this rule, only those factors that account for variances greater than 1 should be included (Norusis, 1993). It should be noted that an eigenvalue of 1.0 was used as the benchmark in deciding the number of factors (Hair et al., 1998; Norusis, 1993).

Table 9: Principal Component Analysis Extraction Results

<b>Factor</b>	<b>Eigen value</b>	<b>Variance Explained (%)</b>	<b>Cumulative Variance (%)</b>
1	6.34	37.32	37.32
2	2.84	16.70	54.02

Extraction method: Principal Component Analysis

An initial (un-rotated) solution identified 17 items and two factors with eigenvalues of more than one, accounting for 54.02% of the variance (see Table 9). As Table 10 on the next page shows, all 17 variables score communalities that range from 0.20 to 0.75. Therefore, it may be concluded that a degree of confidence in the factor solution can be justified.

Table 10: Communalities

	<b>Initial</b>	<b>Extraction</b>
Pro forma financial statements (e.g., cash flow, income statement and budget)	1.00	0.20
Cost-benefit analysis	1.00	0.47
Benchmarking	1.00	0.56
Gap analysis	1.00	0.48
Balanced scorecard	1.00	0.32
Value chain analysis	1.00	0.42
Spreadsheet “what if” analysis	1.00	0.53
SWOT analysis	1.00	0.60
PEST (Political, Economic, Social and Technological) analysis	1.00	0.64
Portfolio analysis (e.g., Boston consulting matrix or General Electric matrix)	1.00	0.71
Porter’s five forces analysis	1.00	0.61
Everything that has to be planned is studied carefully during the process of strategic planning.	1.00	0.58
During the process of strategic planning, we analyse each decision very carefully.	1.00	0.75
During the process of strategic planning, many alternatives are evaluated carefully.	1.00	0.64

	<b>Initial</b>	<b>Extraction</b>
Those who are involved in strategic planning analyse and evaluate projects carefully.	1.00	0.63
Strategic planning is a very demanding process.	1.00	0.49
Those who are involved in strategic planning spare no effort.	1.00	0.49

Extraction Method: Principal Component Analysis.

#### 4.3.2.3 Factor Rotation and factor Loading

Once we were satisfied with the two chosen factors, we examined a loading of all the items within the two factors. The Varimax technique for rotated component analysis was used with a cut-off point for interpreting the factors at 0.40 or greater (Snedecor and Cochran, 1989). The results are summarized in Table 11 on the next page:

Table 11: Rotated Component Matrix<sup>a</sup>

	<b>Component</b>	
	1	2
Pro forma financial statements (e.g., cash flow, income statement and budget)		0.44
Cost – benefit analysis		0.56
Benchmarking	0.44	0.54
Gap analysis		0.65
Balanced scorecard		0.66
Value chain analysis		0.60
Spreadsheet “what if” analysis		0.64
SWOT analysis		0.71
PEST (Political, Economic, Social and Technological) analysis		0.56
Portfolio analysis (e.g., Boston consulting matrix or General Electric matrix)		0.62
Porter’s five forces analysis		0.61
Everything that has to be planned is studied carefully during the process of strategic planning.	0.81	
During the process of strategic planning, we analyse each decision very carefully.	0.83	
During the process of strategic planning, many alternatives are evaluated carefully.	0.91	

	Component	
	1	2
Those who are involved in strategic planning analyse and evaluate projects carefully.	0.85	
Strategic planning is a very demanding process.	0.92	
Those who are involved in strategic planning spare no effort.	0.70	

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

All the items were loaded onto the expected factors for which they were designed. Factor loadings were all higher than 0.40 so that each item loaded higher on its associated construct than on any other construct. As suggested by Hair et al. (1998), a factor loading higher than 0.35 is considered statistically significant at an alpha level of 0.05. This is supported by the discriminant validity of the measurement, as shown in Chapter 5.

#### 4.3.2.4 Factor Naming and Interpretation Process

The interpretation of the two-factor solution was accomplished by relating them to the theoretical concepts of strategic planning. The two factors can be discussed as follows:

Factor 1 consists of 11 items and fits very well with the 'Practice of strategic planning' (mean of use of planning tools) (Aldehayyat et al., 2011; Elbanna, 2010). This factor comprises the following items (1) Pro forma financial statements (e.g., cash flow, income statement and budget), (2) Cost-benefit analysis, (3) Benchmarking, (4) Gap Analysis, (5) Balanced scorecard, (6) Value chain analysis, (7) Spreadsheet "what if" analysis, (8) SWOT Analysis, (9) PEST (Political, Economic, Social and Technological) analysis, (10) Portfolio analysis (e.g., Boston consulting matrix or

General Electric matrix), and (11) Porter's five forces analysis. The values are closely grouped with SWOT analysis as the highest (0.71) and "Pro forma financial statements (e.g., cash flow, income statement and budget)" the lowest (0.44).

The second factor consists of 6 items. This factor represents the managers' opinions regarding 'intensity of strategic planning' (Schäffer and Willauer, 2003). It covers the following variables: (1) Everything that has to be planned is studied carefully during the process of strategic planning, (2) During the process of strategic planning, we analyse each decision very carefully, (3) During the process of strategic planning, many alternatives are evaluated carefully, (4) Those who are involved in strategic planning analyse and evaluate projects carefully, (5) Strategic planning is a very demanding process, and (6) Those who are involved in strategic planning spare no effort. The values are closely grouped, "Strategic planning is a very demanding process" being the highest (0.92) and "Those who are involved in strategic planning spare no effort in implementing our strategic plan" the lowest (0.70).

### **4.3.3 Strategy Implementation Variables**

#### **4.3.3.1 Results of Factor Analysis**

Respondents were asked to indicate the extent to which the statements described the current situation of strategic plan implementation in their organization. All the thirteen items that represent strategy implementation comprehensiveness and strategy alignment were entered for factor analysis. The results of the factor analysis tests are briefly discussed below:

#### 4.3.3.1.1 Bartlett's Test of Sphericity

The results of EFA yielded a two-factor solution that accounted for 69.18% of the variance extracted. The result for Bartlett's Test of Sphericity (BTS) was high at 1977.63, and the associated significance value was very low ( $p=0.00$ ). This shows that the data were appropriate for factor analysis.

#### 4.3.3.1.2 Kaiser-Meyer-Olkin Measure of Sampling Adequacy

The Kaiser-Meyer-Olkin (KMO) for the measurement of sample adequacy (MSA) gives the computed KMO as 0.88, which is adequate, and above the acceptable level (Snedecor and Cochran, 1989) (see Table 12).

Table 12: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.88
	Approx. Chi-Square	1977.63
Bartlett's Test of Sphericity	df	78
	Sig.	0.00

Because the above requirements were met, we concluded that Factor Analysis was appropriate for this data set and allowed the procedures for factor analysis to be performed.

#### 4.3.3.2 Results of the Principal Component Analysis Extraction Process

The factor extraction results using Principal Component Analysis (PCA) are given in Table 13. It should be noted that an eigenvalue of 1.00 was used as the benchmark in deciding the number of factors (Hair et al., 1998; Norusis, 1993).

Table 13: Principal Component Analysis Extraction Results

	<b>Eigenvalue</b>	<b>Variance Explained (%)</b>	<b>Cumulative Variance (%)</b>
	6.86	52.32	52.32
	2.12	16.36	69.18

Extraction method: Principal Component Analysis

An initial (un-rotated) solution identified thirteen items and two factors with eigenvalues of more than one, accounting for 69.18% of the variance (see Table 13). As Table 14 shows, all thirteen variables scored high communalities that range from 0.55 to 0.86. Therefore, it may be concluded that a degree of confidence in the factor solution is justified.

Table 14: Communalities

	<b>Initial</b>	<b>Extraction</b>
We use a diverse set of ideas from internal and external sources (rather than from limited internal sources) in implementing our strategic plan.	1.00	0.71
We evaluate thoroughly each possible action before implementing our strategic plan.	1.00	0.73
We attempt to determine optimal courses of action for implementing our strategic plan.	1.00	0.81
We use experiences of managers from different management levels while implementing our strategic plan.	1.00	0.73
We search extensively for possible implementation actions before we actually implement our strategic plan.	1.00	0.86
Our people have the necessary skills to implement our strategic plan effectively.	1.00	0.70
When our people don't have the necessary skills for implementing our strategic plan, we hire new staff with the necessary skills.	1.00	0.55
Our systems and processes (e.g., reward systems, manufacturing processes, information systems, etc.) are aligned to make our strategic plan work	1.00	0.60
We have formal assignment of organizational specializations, authority and responsibility.	1.00	0.57
Our organizational culture (e.g., values that are shared by employees) is in alignment with our strategic plan.	1.00	0.65
The behaviors/decisions of our managers are consistent with the requirements of our strategic plan.	1.00	0.70
We allocate the resources (e.g., money, technology, staff, etc.) that are necessary to support our strategic plan.	1.00	0.60
We plan and decide according to our established strategic plan.	1.00	0.79

Extraction Method: Principal Component Analysis.

#### 4.3.3.3 Factor Rotation and factor Loading

Once we were satisfied with the two chosen factors, we examined a loading of all the items within the two factors. The Varimax technique for rotated component analysis was used with a cut-off point for interpreting the factors at 0.50 or greater.

The results are summarized in Table 15 below:



Table 15: Rotated Component Matrix<sup>a</sup>

	Component	
	1	2
We use a diverse set of ideas from internal and external sources (rather than from limited internal sources) in implementing our strategic plan.	0.83	
We evaluate thoroughly each possible action before implementing our strategic plan.	0.82	
We attempt to determine optimal courses of action for implementing our strategic plan.	0.89	
We use the experiences of managers from different management levels while implementing our strategic plan.	0.82	
We search extensively for possible implementation actions before we actually implement our strategic plan.	0.90	
Our people have the necessary skills to implement our strategic plan effectively.		0.72
When our people don't have the necessary skills for implementing our strategic plan, we hire new staff with the necessary skills.		0.74
Our systems and processes (e.g., reward systems, manufacturing processes, information systems, etc.) are aligned to make our strategic plan work.		0.77
We have formal assignment of organizational specializations, authority and responsibility.		0.75
Our organizational culture (e.g., values that are shared by employees) is in alignment with our strategic plan.		0.68
The behaviors/decisions of our managers are consistent with the requirements of our strategic plan.		0.72
We allocate the resources (e.g., money, technology, staff, etc.) that are necessary to support our strategic plan.		0.75
We plan and decide according to our established strategic plan.		0.74

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

All items were loaded onto the expected factors for which they were designed. Factor loadings were all higher than 0.50, so that each item loaded higher on its associated construct than on any other construct. As suggested by Hair et al. (1998), a factor loading higher than 0.35 is considered statistically significant at an alpha level

of 0.05. This is supported by the discriminant validity of the measurement, as shown in Chapter 5.

#### **4.3.3.4 Factor Naming and Interpretation Process**

The interpretation of the two-factor solution was accomplished by relating the factors to the theoretical concepts of strategic management and strategic planning theories. The factors can be described as follows:

Factor 1 consists of 5 items and fits very well with the ‘comprehensiveness’ of the strategic plan implementation (Hakimpoor, 2014). This factor comprises the following variables: (1) We use a diverse set of ideas from internal and external sources (rather than from limited internal sources) in implementing our strategic plan, (2) We evaluate thoroughly each possible action before implementing our strategic plan, (3) We attempt to determine the optimal courses of action for implementing our strategic plan, (4) We use the experiences of managers from different management levels while implementing our strategic plan, and (5) We search extensively for possible implementation actions before we actually implement our strategic plan.

The values are closely grouped, the highest being “We search extensively for possible implementation actions before we actually implement our strategic plan” (0.90) and the lowest being both “We use the experiences of managers from different management levels while implementing our strategic plan” and “We evaluate thoroughly each possible action before implementing our strategic plan” (0.82).

The second factor consists of 8 items. This factor represents the managers’ opinions regarding the ‘alignment’ of strategic planning (Higgins, 2005). It covers the

following variables: (1) Our people have the necessary skills to implement our strategic plan effectively, (2) When our people don't have the necessary skills for implementing our strategic plan, we hire new staff with the necessary skills, (3) Our systems and processes (e.g., reward systems, manufacturing processes, information systems, etc.) are aligned to make our strategic plan work, (4) We have formal assignment of organizational specializations, authority and responsibility, (5) Our organizational culture (e.g., values that are shared by employees) is in alignment with our strategic plan, (6) The behaviors/decisions of our managers are consistent with the requirements of our strategic plan, (7) We allocate the resources (e.g., money, technology, staff, etc.) that are necessary to support our strategic plan, and (8) We plan and decide according to our established strategic plan. The values are closely grouped, the highest being "Our systems and processes (e.g., reward systems, manufacturing processes, information systems, etc.) are aligned to make our strategic plan work" (0.77) and the lowest "Our organizational culture (e.g., values that are shared by employees) is in alignment with our strategic plan" (0.68).

#### **4.3.4 Strategy Evaluation Variables**

This section reports the scale development for the strategy evaluation constructs. A sequence of steps was followed in the scale development process. This involves examining the internal reliability of the data set using item-total correlation, a reliability test as reported in the previous chapter, and exploratory factor analysis. Items which fulfilled all requirements in the exploratory factor analysis were then submitted to a reliability analysis to measure the item-total correlation and Cronbach's alpha before being used in further analysis. This type of procedure was undertaken to

sustain the reliability and validity of the data. Below we report the item scale development based on the survey questionnaire.

#### **4.3.4.1 Results of Factor Analysis**

Respondents were asked to indicate the extent to which each statement described the evaluation of the strategic planning process in their companies. All 8 items representing accountability and strategic control were entered for factor analysis. The results of the Factor Analysis tests are briefly discussed below:

##### **4.3.4.1.1 Bartlett's Test of Sphericity**

The result for Bartlett's Test of Sphericity (BTS) was high at 752.30, and the associated significance value was very low ( $p=0.00$ ). This shows that the data were appropriate for factor analysis.

##### **4.3.4.1.2 Kaiser-Meyer-Olkin Measure of Sampling Adequacy**

The Kaiser-Meyer-Olkin (KMO) for the measurement of sample adequacy (MSA) gives the computed KMO as 0.84, which is adequate, and above the acceptable level (Snedecor and Cochran, 1989) (see Table 16).

Table 16: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.84
	Approx. Chi-Square	752.30
Bartlett's Test of Sphericity	df	28.0
	Sig.	0.00

Source: Analysis of survey data

Since the above requirements were met, we concluded that Factor Analysis was appropriate for this data set, allowing the procedures for factor analysis to be performed.

#### 4.3.4.2 Results of Principal Component Analysis Extraction process

The factor extraction results using Principal Component Analysis (PCA) are given in Table 17. It should be noted that an eigenvalue of 1.0 was used as the benchmark in deciding the number of factors (Hair et al., 1998; Norusis, 1993).

Table 17: Principal Component Analysis Extraction Results

<b>Factor</b>	<b>Eigenvalue</b>	<b>Variance Explained (%)</b>	<b>Cumulative Variance (%)</b>
1	3.88	48.57	48.57
2	1.90	23.77	72.35

Extraction method: Principal Component Analysis

An initial (un-rotated) solution identified 8 items and two factors with eigenvalues of more than one, accounting for 72.35% of the variance (see Table 17). As Table 18 on the next page shows, all 8 variables scored high communalities ranging from 0.62 to 0.83. Therefore, it could be concluded that a degree of confidence was achieved.

Table 18: Communalities

	Initial	Extraction
Our organization conducts regular audits/reviews of our programs/activities.	1.00	0.76
Our organization benchmarks its performance on key indicators against comparable organizations.	1.00	0.74
Managers at my level are held accountable for the results of their activities.	1.00	0.62
The individual to whom I report periodically reviews my results with me.	1.00	0.64
After we develop and implement our strategic plan, we engage in a systematic and continuous effort to identify whether the environmental conditions (e.g., forecasts of inflation or market growth rate, etc.) forming the bases of our plan have changed so that we can update our assumptions and strategic plan.	1.00	0.73
We focus on the accomplishment of the objectives of our strategic plan.	1.00	0.70
Once implementation of our strategic plan has begun, we engage in a systematic and continuous effort to identify and appraise any unforeseen effects of the implemented decisions so that we can assess whether we should change our course of action.	1.00	0.78
During the development and implementation of our strategic plan, we engage in a systematic and continuous effort to monitor the full range of emerging events inside and outside our organization which are likely to threaten the course of our strategic action, so that we can uncover important yet unanticipated information and safeguard our strategic plan on a continuous basis.	1.00	0.83

Extraction Method: Principal Component Analysis.

#### 4.3.4.3 Factor Rotation and factor Loading

Once we were satisfied with the two chosen factors, we examined a loading of all the items within the two factors. The Varimax technique for rotated component analysis was used with a cut-off point for interpreting the factors at 0.50 or greater.

The results are summarized in Table 19 below:

Table 19: Rotated Component Matrix<sup>a</sup>

	Component	
	1	2
Our organization conducts regular audits/reviews of our programs/activities.		0.87
Our organization benchmarks its performance on key indicators against comparable organizations.		0.85
Managers at my level are held accountable for the results of their activities.		0.75
The individual to whom I report periodically reviews my results with me.		0.79
After we develop and implement our strategic plan, we engage in a systematic and continuous effort to identify whether the environmental conditions (e.g., forecasts of inflation or market growth rate, etc.) forming the bases of our plan have changed so that we can update our assumptions and strategic plan.	0.81	
We focus on the accomplishment of our strategic plan objectives.	0.81	
Once implementation of our strategic plan has begun, we engage in a systematic and continuous effort to identify and appraise unforeseen effects of the implemented decisions so that we can assess whether we should change our course of action.	0.88	
During the development and implementation of our strategic plan, we engage in a systematic and continuous effort to monitor the full range of emerging events inside and outside our organization which are likely to threaten the course of our strategic action, so that we can uncover important yet unanticipated information and safeguard our strategic plan on a continuous basis.	0.91	

Source: Analysis of survey data

Extraction Method: Principal Component Analysis- Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 5 iterations

All items were loaded onto the expected factors for which they were designed. Factor loadings were all higher than 0.5, so that each item loaded higher on its associated construct than on any other construct. As suggested by Hair et al. (1998), a factor loading higher than 0.35 is considered statistically significant at an alpha level

of 0.05. This is supported by the discriminant validity of the measurement, as shown in Chapter 5.

#### **4.3.4.4 Factor Naming and Interpretation Process**

The interpretation of the two-factor solution was made by relating the factors to the theoretical concepts of strategic management and strategic planning theories. The two factors may be described as follows:

Factor 1 consists of 4 items and fits very well with ‘accountability’ (Cavalluzzo and Ittner, 2004; Elbanna, 2013). This factor comprises the following variables: (1) Our organization conducts regular audits/reviews of our programs/activities, (2) Our organization benchmarks its performance on key indicators against comparable organizations, (3) Managers at my level are held accountable for the results of their activities, and (4) The individual to whom I report periodically reviews my results with me. The values are closely grouped with “Our organization conducts regular audits /reviews of our programs/activities” as the highest (0.87) and “Managers at my level are held accountable for the results of their activities” as the lowest (0.75).

The second factor consists of 4 items. This factor represents the respondents’ opinions regarding “strategic control” (Schreyögg and Steinmann, 1987). It covers the following variables: (1) After we develop and implement our strategic plan, we engage in a systematic and continuous effort to identify whether the environmental conditions (e.g., forecasts of inflation or market growth rate, etc.) forming the bases of our plan have changed so that we can update our assumptions and strategic plan, (2) We focus on the accomplishment of the objectives of our strategic plan, (3) Once implementation of our strategic plan has begun, we engage in a systematic and continuous effort to



identify and appraise unforeseen effects of the implemented decisions so that we can assess whether we should change our course of action, and (4) During the development and implementation of our strategic plan, we engage in a systematic and continuous effort to monitor the full range of emerging events inside and outside our organization which are likely to threaten the course of our strategic action, so that we can uncover important yet unanticipated information and safeguard our strategic plan on a continuous basis. The values are closely grouped with “During the development and implementation of our strategic plan, we engage in a systematic and continuous effort to monitor the full range of emerging events inside and outside our organization” as the highest (0.91) and “After we develop and implement our strategic plan, we engage in a systematic and continuous effort” and “We focus on the accomplishment of the objectives of our strategic plan” as joint lowest (0.81).

#### **4.3.5 Environmental Dynamism Variable**

This section reports the scale development for the environmental dynamism construct. This section reports the development of the item scale based on the survey questionnaire.

##### **4.3.5.1 Results of Factor Analysis**

Respondents were asked to indicate the extent to which the statements described the evaluation of the environmental dynamism in their organizations. Four items that measured the environmental dynamism were entered for factor analysis. The results of the Factor Analysis tests are briefly discussed below.

#### 4.3.5.1.1 Bartlett's Test of Sphericity

The result for Bartlett's Test of Sphericity (BTS) was high at 630.36, and the associated significance value was very low ( $p=0.00$ ). This shows that the data were appropriate for factor analysis.

#### 4.3.5.1.2 Kaiser-Meyer-Olkin Measure of Sampling Adequacy

The Kaiser-Meyer-Olkin (KMO) for measurement of sample adequacy (MSA) gives the computed KMO as 0.83, which is adequate, and above the acceptable level (see Table 20).

Table 20: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.83
	Approx. Chi-Square	630.36
Bartlett's Test of Sphericity	df	6.00
	Sig.	0.00

As the above requirements were met, we concluded that Factor Analysis was appropriate for this data set, allowing the procedures for factor analysis to be performed.

#### 4.3.5.2 Results of Principal Component Analysis Extraction Process

The factor extraction results using Principal Component Analysis (PCA) are given in Table 21. It should be noted that an eigenvalue of 1.00 was used as the benchmark in deciding the number of factors (Hair et al., 1998; Norusis, 1993).

Table 21: Principal Component Analysis Extraction Results

<b>Factor</b>	<b>Eigenvalue</b>	<b>Variance Explained (%)</b>	<b>Cumulative Variance (%)</b>
1	3.35	83.78	83.78

Extraction method: Principal Component Analysis

An initial (un-rotated) solution identified 4 items and one factor with eigenvalues of more than one, accounting for 83.78% of the variance (see Table 21). As Table 22 shows, all 4 variables scored high communalities ranging from 0.80 to 0.86. Therefore, it may be concluded that a degree of confidence in the factor solution is justified.

Table 22: Communalities

	<b>Initial</b>	<b>Extraction</b>
Products or services in our industry are updated quickly.	1.00	0.86
The acts of our competitors are difficult to predict.	1.00	0.86
The technology in our industry develops/changes quickly.	1.00	0.80
It is difficult to predict the changes in customer needs.	1.00	0.84

Extraction Method: Principal Component Analysis.

#### **4.3.5.3 Factor Rotation and factor Loading**

Once we were satisfied with the chosen factor, a loading of all the items within the four factors were examined. The Varimax technique for rotated component analysis was used with a cut-off point for interpreting the factors at 0.50 or greater. The results are summarized in Table 23.

Table 23: Rotated Component Matrix<sup>a</sup>

	<b>Component</b>
	1
Products or services in our industry are updated quickly.	0.92
The acts of our competitors are difficult to predict.	0.93
The technology in our industry develops/changes quickly.	0.90
It is difficult to predict the changes in customer needs.	0.92

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 7 iterations.

All the items were loaded onto the expected factors for which they were designed. Factor loadings were all higher than 0.5 so that each item loaded higher on its associated construct than on any other construct. As suggested by Hair et al. (1998), a factor loading higher than 0.35 is considered statistically significant at an alpha level of 0.05. This is supported by the discriminant validity of the measurement, as shown in Chapter 5.

#### **4.3.5.4 Factor Naming and Interpretation Process**

The interpretation of the one-factor solution was accomplished by relating it to the theoretical concepts of strategic management and strategic planning theories. The suggested factor consists of 4 items and fits very well with the ‘environmental dynamism’ factor (Li and Liu 2014). This factor comprises the following variables: (1) Products or services in our industry are updated quickly, (2) The acts of our competitors are difficult to predict, (3) The technology in our industry develops/changes quickly, and (4) It is difficult to predict the changes in customer needs. The values are closely grouped, the highest being “The acts of our competitors are difficult to predict” (0.93) and the lowest “The technology in our industry develops/changes quickly” (0.90).

### **4.3.6 Organizational Outcomes Variables**

This section reports the scale development for the constructs of the organizational outcomes. This part reports the item scale development based on the survey questionnaire.

#### **4.3.6.1 Results of Factor Analysis**

Respondents were asked to indicate the extent to which the statements describe the results of the strategic planning process in their companies. All the 13 items that are related to the organizational outcomes were entered for factor analysis. The results of the Factor Analysis tests are briefly discussed below:

##### **4.3.6.1.1 Bartlett's Test of Sphericity**

The result for Bartlett's Test of Sphericity (BTS) was high at 2280.76, and the associated significance value was very low ( $p=0.00$ ). This shows that the data were appropriate for factor analysis.

##### **4.3.6.1.2 Kaiser-Meyer-Olkin Measure of Sampling Adequacy**

The Kaiser-Meyer-Olkin (KMO) for a measurement of sample adequacy (MSA) gives the computed KMO as 0.92, which is adequate, and above the acceptable level (Snedecor and Cochran, 1989) (see Table 24).

Table 24: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.92
	Approx. Chi-Square	2280.76
Bartlett's Test of Sphericity	df	78.00
	Sig.	0.00

Source: Analysis of survey data

As the above requirements were met, we concluded that Factor Analysis was appropriate for this data set, allowing the procedures for factor analysis to be performed.

#### 4.3.6.2 Results of Principal Component Analysis Extraction Process

The factor extraction results using Principal Component Analysis (PCA) are given in Table 25. It should be noted that an eigenvalue of 1.00 was used as the benchmark in deciding the number of factors (Hair et al., 1998; Norusis, 1993).

Table 25: Principal Component Analysis Extraction Results

Factor	Eigenvalue	Variance Explained (%)	Cumulative Variance (%)
1	8.254	63.490	63.49
2	1.651	12.697	76.18

Extraction method: Principal Component Analysis

An initial (un-rotated) solution identified 13 items and three factors with eigenvalues of more than one, accounting for 76.18% of the variance (see Table 25). As Table 26 on the following page shows, all 13 variables scored high communalities that ranged from 0.67 to 0.87. Therefore, it may be concluded that a degree of confidence in the factor solution can be justified.

Table 26: Communalities

	<b>Initial</b>	<b>Extraction</b>
Quality of products or services provided	1.00	0.73
Development of products/services	1.00	0.77
Employee satisfaction	1.00	0.71
Customer satisfaction	1.00	0.72
Sales/ revenues growth	1.00	0.82
Market share	1.00	0.80
Return on investment	1.00	0.77
Social responsibilities	1.00	0.67
Operational efficiency	1.00	0.68
Adapting to the changes in competitors' market strategies.	1.00	0.87
Rapid adaptation of products or services to changes in clients' needs.	1.00	0.82
Rapid reaction to new threats in the market.	1.00	0.74
Rapid exploitation of new market opportunities.	1.00	0.82

Extraction Method: Principal Component Analysis.

#### 4.3.6.3 Factor Rotation and factor Loading

Once we were satisfied with the two chosen factors, we examined the loading of all the items within the two factors. The Varimax technique for rotated component analysis was used with a cut-off point for interpretation of the factors at 0.50 or greater.

The results are summarized in Table 27 below:

Table 27: Rotated Component Matrix<sup>a</sup>

	Component	
	1	2
Quality of products or services provided	0.82	
Development of products/services	0.78	
Employee satisfaction	0.83	
Customer satisfaction	0.72	
Sales/revenues growth	0.85	
Market share	0.86	
Return on investment	0.84	
Social responsibilities	0.60	
Operational efficiency	0.63	
Adapting to the changes in competitors' market strategies.		0.87
Rapid adaptation of products or services to changes in clients' needs.		0.88
Rapid reaction to new threats in the market.		0.81
Rapid exploitation of new market opportunities.		0.87

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

All items were loaded onto the expected factors for which they were designed. Factor loadings were all higher than 0.50 so that each item loaded higher on its associated construct than on any other construct. As suggested by Hair et al. (1998), a factor loading higher than 0.35 is considered statistically significant at an alpha level of 0.05. This is supported by the discriminant validity of the measurement, as shown in Chapter 5.

#### 4.3.6.4 Factor Naming and Interpretation Process

The interpretation of the two-factor solution was accomplished by relating the factors to the theoretical concepts of strategic management and strategic planning theories. The factors may be described as follows:



Factor 1 consists of 9 items and fits very well with 'organizational performance' (Zuriekat, Salameh, and Alrawashdeh, 2011; Vorhies and Morgan, 2005; Hart and Banbury, 1994; Child, 1972). This factor comprises the following variables (1) Quality of products or services provided, (2) Development of products/services, (3) Employee satisfaction, (4) Customer satisfaction, (5) Sales/revenues growth, (6) Market share, (7) Return on investment, (8) Social responsibilities, and (9) Operational efficiency. The values are closely grouped, the highest being "Market share" (0.86) and the lowest "Social responsibilities" (0.60).

The second factor consists of 4 items. This factor represents the respondents' opinions regarding the 'competitiveness' of the organization (Child, 1972; Ruekert et al. 1985). It covers the following variables: (1) Adapting to the changes in competitors' market strategies, (2) Rapid adaptation of products or services to changes in clients' needs, (3) Rapid reaction to new threats in the market, and (4) Rapid exploitation of new market opportunities. The values are closely grouped, the highest being "Rapid adaptation of products or services to changes in clients' needs" (0.88) and the lowest "Rapid reaction to new threats in the market" (0.81).

#### **4.4 Descriptive Analysis of the Sampled Organizations and Respondents**

This section focuses on providing general information about the respondents and participant companies. The aim was to provide a brief account of the profile of the sample and the respondents in the study.

Frequency analysis was used to distribute the participating companies and respondents according to the following characteristics:

1. Number of Full Time Employees
2. Number of Expatriate Employees
3. Percentage of Foreign Ownership
4. Number of Years in Current Organization
5. Managerial Level
6. Gender

#### 4.4.1 Number of Full Time Employees

Organizational size was measured using the number of full time employees. As shown in Table 28, most of the companies (nearly 72%) fell into the category of having more than 250 employees (131 companies out of 182). Nearly 38% of the participating companies had more than 1000 full time employees. Only 15 companies (8.2%) had fewer than 100 full time employees. The analysis indicated that the average number of employees for the whole sample was 779 employees.

Table 28: Number of Full Time Employees

		<b>Frequency</b>	<b>Percent</b>
Valid	Fewer than 100 Employees	15	8.2
	100-249 Employees	36	19.8
	250-499 Employees	31	17.0
	500-999 Employees	31	17.0
	More than 1000 Employees	69	37.9
	Total	182	100.0

#### 4.4.2 Number of Expatriate Employees

One of the demographic questions was related to the number of expatriate employees that are hired by every company in the country. Table 29 reveals that most of the companies (approximately 63%) in this study had fewer than 250 expatriates. 32 companies (17.6%) had 250-499 expatriates while 21 companies had 500-999 expatriates (11.5%). Only 14 companies (7.7%) had more than 1000 expatriates. This is perhaps because the Abu Dhabi government a few years ago started a process of what is called Emiratization in governmental organisations. The demographics here reflect the government movement and support for Emiratization (Localization).

Table 29: Number of Expatriate Employees

	<b>Frequency</b>	<b>Percent</b>
Fewer than 100 Expatriate Employees	63	34.6
100-249 Expatriate Employees	52	28.6
250-499 Expatriate Employees	32	17.6
500-999 Expatriate Employees	21	11.5
More than 1000 Expatriate Employees	14	7.70
Total	182	100.0

#### 4.4.3 Percentage of Foreign Ownership

Table 30 reveals that most of the companies (83%) in this survey were either 0% foreign owned or 1-25% foreign owned. Only 31 companies (17%) out of the 182 companies were under 26-49% of foreign ownership. This is due to the fact that the maximum percentage of foreign ownership allowed in Abu Dhabi is 49%. Furthermore, the Abu Dhabi government encourages the local ownership of companies, in particular companies working in critical sectors such as the energy sector.

Table 30: Percentage of Foreign Ownership

		<b>Frequency</b>	<b>Percent</b>
Valid	0% Foreign Ownership	69	37.9
	1-25 % Foreign Ownership	82	45.1
	26-49% Foreign Ownership	31	17.0
	Total	182	100.0

#### 4.4.4 Number of Years in Current Organization

Table 31 shows that nearly half of the respondents (49.5%) have been with their present company for more than 10 years. Consequently, it can be concluded that respondents in this research can provide valuable information about the process and outcomes of strategic planning. However, 28% of the respondents had worked with the same organisation for 5-10 years (51 respondents). Finally, only 41 out of the 182 respondents had worked for the same organisation for less than 5 years.

Table 31: Number of Years in Current Organization

		<b>Frequency</b>	<b>Percent</b>
Valid	More than 10 Years	90	49.5
	5-10 Years	51	28.0
	Less than 5 year	41	22.5
	Total	182	100.0

#### 4.4.5 Managerial Level

Table 32 reveals that nearly half of the respondents in this survey hold a position at the top level of management (48.4%). 73 of the respondents hold a position at middle management level (40.1%). This is actually normal, since people who are involved in the strategic planning process are mostly located at these two levels. Finally, only 20 respondents were working at the lower management level (11%).

Table 32: Managerial Level

		<b>Frequency</b>	<b>Percent</b>
Valid	Lower Management	20	11.0
	Middle Management Level	73	40.1
	Top Management Level	88	48.4
	Total	181	99.5
Missing	System	1	0.5
Total		182	100.0

#### 4.4.6 Gender

Table 33 shows that most of the respondents (77.5) were males and that only 41 females (22.5%) participated in the survey. This is a similar result to that in related research in other Arab countries, such as Egypt. For example, 32% of respondents in a similar study conducted in Egypt were female (Elbanna, 2007). Similar results were also reported in the UAE public sector (Elbanna, 2013). However, we should be cautious about extending such results to other Arab countries, for instance, Saudi Arabia.

Table 33: Gender

		<b>Frequency</b>	<b>Percent</b>
Valid	Male	141	77.5
	Female	41	22.5
	Total	182	100.0

#### 4.5 Chapter Summary

This chapter is devoted to reporting the preliminary analysis of the collected data. This includes, first, encoding, editing and entering the data into SPSS, followed by reliability and validity testing, which covers all the research constructs to find the extent to which the measurements were reliable and valid. Item-to-total correlation was calculated for each variable. As shown in Table 34, all the variables had acceptable

reliability values ranging from 0.83 to 0.93, which was significantly higher than the acceptable level of 0.60 (Nunnally, 1978) and therefore, acceptable for further analysis. Table 34 presents a summary of the reliability analysis of the main constructs in this study, which are set out in Table 7. Then, steps to maximise content and construct validity were taken. The reliability and validity analyses show that our measures are both reliable and valid. In the next chapter, various statistical techniques are used to explore the practice of strategic planning in the sampled companies and test the study hypotheses. Last, we examined the general descriptive analysis of the respondents' profile and their response distribution. In addition, some initial interpretations are also put forward to start the process of data analysis.

Table 34: Reliability analysis of main constructs in the study

<b>Basic Constructs</b>	<b>Total Number of Items</b>	<b>Item-Total Correlation</b>	<b>Cronbach's Alpha</b>
Practice of strategic planning	11	0.55	0.83
Intensity of strategic planning	6	0.67	0.89
Comprehensiveness of the strategic plan implementation	5	0.68	0.92
Alignment of the strategy plan implementation	8	0.74	0.90
Accountability	4	0.57	0.85
Strategic Control	4	0.70	0.89
Environmental Dynamism	4	0.78	0.93
Organizational Performance	9	0.83	0.90
Organizational Competitiveness	4	0.80	0.93

## **Chapter 5: Exploratory Analysis and Hypotheses Testing**

### **5.1 Introduction**

The previous chapter has validated and purified the data that were obtained from the fieldwork questionnaire and has provided an exploratory analysis of the study sample and respondents. This chapter introduces an exploratory analysis of certain aspects of strategic planning practices in the sampled organizations and then presents the results of hypothesis testing. SPSS/AMOS version 22 was used to analyse the data. As discussed in Chapter 1, the aim of the thesis is to explore the practices of strategic planning in the sampled organizations and to understand the role of strategic planning on organizational outcomes. Therefore, as noted in Chapter 3, this chapter attempts two tasks: to explore some practices of strategic planning in Abu Dhabi's semi-government sector and, more importantly, to examine the study's hypotheses.

### **5.2 Exploratory Analysis of Strategic Planning Practice**

This section aims to provide an exploratory analysis of the strategic planning practices in the sampled organizations. Frequency analysis was used to classify the participating organizations according to their practice in the following aspects of planning:

1. Development of the First Strategic Plan
2. Planning Horizon
3. Time to Prepare the Strategic Plan
4. Participation in The Development of Strategic Plans (by Full Time Employees)

5. Participation in The Development of Strategic Plans (by Managers/Board Members)
6. Participation in The Development of Strategic Plans (by Managers/Board Members and Organizational Size)
7. Participation in The Development of Strategic Plans (by Managers/Board Members and Ownership)
8. Tools Used in Developing Strategic Plans
9. Tools Used in Strategic Planning (by Organizational Size)
10. Tools Used in Strategic Planning (by Ownership)

### 5.2.1 Development of the First Strategic Plan

Table 35, on the next page, reveals that nearly half of the organizations (47.3%) in this survey developed their first strategic plans less than five years ago. 56 organizations (30.8%) developed their strategic plans five years ago. Finally, only 22% of the respondents developed their strategic plans more than 5 years ago. This reflects the fact that in Abu Dhabi strategic planning is still in its early stages, as confirmed by related research (Elbanna, 2013), which shows that the formal practice of strategic planning in Abu Dhabi public organizations started a decade ago.

Table 35: Distribution of the Sample by Development of the First Strategic Plan

		<b>Frequency</b>	<b>Percent</b>
Valid	Less Than 5 Years	86	47.3
	5 Years	56	30.8
	More Than 5 Years	40	22.0
	Total	182	100.0



### 5.2.2 Planning Horizon

Table 36 reveals that most of the organizations (89%) in this survey developed strategic plans that extend over 5 years at least. Only 20 organizations out of the 182 that participated in this survey developed a strategic plan that covers less than 5 years. Table 36 highlights the fact that 5 years is the most common time horizon used in Abu Dhabi – 114 of the 182 participants used it as the period in which their strategic plans would operate.

Table 36: Distribution of the Sample by Planning Horizon

		<b>Frequency</b>	<b>Percent</b>
Valid	Less Than 5 Years	20	11.0
	5 Years	114	62.6
	More Than 5 Years	48	26.4
	Total	182	100.0

The analysis shows that the average number of years in the sample's planning horizon is 5.75 years. This time horizon is longer than the strategic planning horizon found in the study by Elbanna (2013). In his study, the mean score for the sample as a whole regarding the strategic planning horizon was 4.2 years and most organizations developed their plans for periods of either 3 or 5 years.

### 5.2.3 Time to Prepare the Strategic Plan

Table 37 on the next page indicates that most of the organizations which participated in this survey (69.2%) took between 4 and 8 months to develop their strategic plans. Only 40 organizations (22%) took less than 4 months to do so. However, a small number of organizations (8.8%) needed more than 8 months to

develop their strategic plans. The analysis also shows that the average time needed in the whole sample to prepare the strategic plan was 7.44 months.

The result of this study confirms the findings of Elbanna (2013) and Elbanna (2010) that most organizations take less than 8 months to develop strategic plans. In addition, Elbanna (2010) also found that large organizations tend to require more time than small ones to prepare their strategic plans. The strategic planning process in large organizations is more complex than that in small organizations and this may account for the discrepancy.

Table 37: Distribution of the Sample by Time Needed to Prepare the Strategic Plan

		<b>Frequency</b>	<b>Percent</b>
Valid	Less Than 4 Months	40	22.0
	4-8 Months	126	69.2
	More Than 8 Months	16	8.80
	Total	182	100.0

#### **5.2.4 Participation in the Development of Strategic Plans (by Full Time Employees)**

Table 38 reveals that nearly 79% of the participating organizations put 10 or fewer employees in charge of developing the strategic plan (42.3% + 36.8%). Only 38 organizations (20.9%) have more than 10 employees participating in developing the strategic plan. The analysis shows that the average number of employees participating in the development of the strategic plans in the whole sample is 8.9.

This indicates that very few full time employees participate in developing the strategic plan. Similarly, in the study of Elbanna (2013), it was found that the sampled organizations had an average of 6.5 employees involved in planning strategies. In

addition, the size of the strategic planning units for federal organizations (4.2 employees) tends to be smaller than that for local organizations (8.2 employees).

Table 38: Distribution of the Sample by Full Time Employees who are Charged with Strategic Planning

		<b>Frequency</b>	<b>Percent</b>
Valid	Fewer Than 5 Employees	77	42.3
	5-10 Employees	67	36.8
	More Than 10 Employees	38	20.9
	Total	182	100.0

### 5.2.5 Participation in the Development of Strategic Plans (by Managers/Board Members)

Table 39 shows, for the sample as a whole, that CEOs/managing directors have the highest level of participation in the strategic planning process: the board of directors and the planning committees/specialists come second and third, respectively. All the previous individuals are appreciably above the median, indicating a high level of participation in the strategic planning process. Table 39 also shows that managers fall considerably below the previously mentioned groups, indicating that they do not actively participate in the strategic planning process. Finally, members of the supervisory management and lower managers scored the lowest mean (mean = 3). These findings support the previous results that there is a positive link in the Arab region, including the UAE, between managerial level and the degree of participation in the strategic planning process, and demonstrate that the higher the seniority, the greater the participation in the strategic planning process (Elbanna, 2007, 2010).

Table 39: Distribution of the Sample by Managers/Board Members Participating in Strategic Planning

	Mean
CEO/managing director	4.71
Board of directors	4.54
Planning committee/specialists	4.23
Senior managers	4.00
Middle managers	3.34
Members of the supervisory management/lower managers	3.01

Note; N = 182; the mean is an average on a scale of 1: strongly disagree to 5: strongly agree.

### 5.2.6 Participation in the Development of Strategic Plans (by Managers/Board Members and Organizational Size)

The analysis of participation in the development of strategic planning taking into account members of the top management team or board and organizational size (number of employees) shows a high degree of agreement in the results, as shown in Table 40, between the whole sample and the subsamples. In general the participation of the CEO/managing director, board of directors and planning committee/specialists is high (Mean  $\leq$  4) in all sectors. However, the participation of managers and members of the supervisory management/lower managers tends to be lower. It was interesting to find that the participation of the middle managers (Mean= 4.466) and members of supervisory management/lower managers (Mean= 4.200) is high in organizations which have fewer than 100 employees.

Table 40: Participation in the Development of Strategic Plans (by Managers/Board Members) according to Organizational Size

		<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error</b>
CEO/managing director	Fewer than 100 Employees	15	4.60	0.73	0.19
	100-249 Employees	36	4.86	0.424	0.07
	250-499 Employees	31	4.77	0.56	0.10
	500-999 Employees	31	4.64	0.48	0.08
	More than 1000 Employees	69	4.66	0.56	0.06
	Total	182	4.71	0.54	0.04
	Board of directors	Fewer than 100 Employees	15	4.66	0.72
100-249 Employees		36	4.72	0.61	0.10
250-499 Employees		31	4.61	0.84	0.15
500-999 Employees		31	4.67	0.47	0.08
More than 1000 Employees		69	4.33	0.63	0.07
Total		182	4.54	0.66	0.04
Planning committee/specialists		Fewer than 100 Employees	15	4.66	0.89
	100-249 Employees	36	4.44	0.77	0.12
	250-499 Employees	31	4.32	0.70	0.12
	500-999 Employees	31	3.96	0.75	0.13
	More than 1000 Employees	69	4.10	0.42	0.05
	Total	182	4.23	0.68	0.05
	Senior managers	Fewer than 100 Employees	15	4.46	0.74
100-249 Employees		36	4.11	0.82	0.13
250-499 Employees		31	3.83	0.68	0.12
500-999 Employees		31	4.00	0.68	0.12
More than 1000 Employees		69	3.91	0.87	0.10
Total		182	4.00	0.80	0.05
Middle managers		Fewer than 100 Employees	15	4.46	0.91
	100-249 Employees	36	3.52	1.08	0.18
	250-499 Employees	31	3.12	0.80	0.14

		N	Mean	Std. Deviation	Std. Error
Members of the supervisory management/lower managers	500-999 Employees	31	3.12	1.23	0.22
	More than 1000 Employees	69	3.18	1.03	0.12
	Total	182	3.34	1.08	0.08
	Fewer than 100 Employees	15	4.20	1.08	0.27
	100-249 Employees	36	3.05	1.24	0.20
	250-499 Employees	31	2.64	1.01	0.18
	500-999 Employees	31	3.03	0.91	0.16
	More than 1000 Employees	69	2.86	1.53	0.18
	Total	182	3.00	1.31	0.097

The mean is an average on a scale of 1 strongly disagree to 5 strongly agree.

### 5.2.7 Participation in the Development of Strategic Plans (by Managers/Board Members and Ownership)

The analysis of participation in the development of strategic planning taking into account members of the top management team or board and ownership shows that there is a high degree of agreement in the results shown in Table 41 between the whole sample and the subsamples. In general the participation of the CEO/managing director, board of directors, and planning committee/specialists is high (Mean  $\leq$  4) in the three categories of ownership. However, the participation of managers and members of the supervisory management/lower managers tends to be lower. It was interesting to find that the participation of the middle managers (Mean=2.99) and members of the supervisory management/lower managers (Mean=2.62) is very low in organizations that have 1-25 % Foreign Ownership. This may be because such organizations have limited numbers of employees.

Table 41: Participation in the Development of Strategic Plans (by Managers/Board Members) in relation to Ownership

		<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error</b>
CEO/managing director	0% Foreign Ownership	69	4.69	0.60	0.07
	1-25 % Foreign Ownership	82	4.68	0.49	0.05
	26-49% Foreign Ownership	31	4.83	0.52	0.09
	Total	182	4.71	0.54	0.04
Board of directors	0% Foreign Ownership	69	4.49	0.81	0.09
	1-25 % Foreign Ownership	82	4.51	0.50	0.05
	26-49% Foreign Ownership	31	4.74	0.68	0.12
	Total	182	4.54	0.66	0.04
Planning committee/specialists	0% Foreign Ownership	69	4.39	0.75	0.09
	1-25 % Foreign Ownership	82	4.08	0.57	0.06
	26-49% Foreign Ownership	31	4.25	0.72	0.13
	Total	182	4.23	0.68	0.05
Senior managers	0% Foreign Ownership	69	4.11	0.84	0.10
	1-25 % Foreign Ownership	82	3.81	0.81	0.09
	26-49% Foreign Ownership	31	4.22	0.49	0.08
	Total	182	4.00	0.80	0.05
Middle managers	0% Foreign Ownership	69	3.75	1.09	0.13
	1-25 % Foreign Ownership	82	2.98	1.13	0.125
	26-49% Foreign Ownership	31	3.35	0.48	0.08
	Total	182	3.34	1.08	0.08

		<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error</b>
Members of the supervisory management/lower managers	0% Foreign Ownership	69	3.36	1.31	0.15
	1-25 % Foreign Ownership	82	2.62	1.38	0.15
	26-49% Foreign Ownership	31	3.22	0.76	0.13
	Total	182	3.00	1.31	0.09

The mean is an average on a scale of 1 strongly disagree to 5 strongly agree.

### 5.2.8 Tools Used in Developing Strategic Plans

As shown in Table 42, the first six tools clearly exceed the median measure, i.e., pro forma financial statements (e.g., cash flow, income statement and budget), cost-benefit analysis, benchmarking, gap analysis, balanced scorecard and SWOT analysis. One of the reasons for this finding may be associated with the ease with which these six tools can be prepared and used (Elbanna, 2007). Less use is made of value chain analysis, spreadsheet 'what if' analysis, Porter's five forces analysis, Portfolio analysis (e.g., Boston consulting matrix or General Electric matrix) and PEST (Political, Economic, Social and Technological) analysis. However, the mean of all of these tools is still higher than the cut-off point (3). As noted by Elbanna (2007), this may be due to the more demanding skills required to use these tools effectively. In this regard it is the ease of application that determines the type of tool used in strategic planning. The results in general testify to the high awareness level of strategic planning tools in the UAE in general.



Table 42: Distribution of the sample by Strategic Planning Tools Used

<b>Tools</b>	<b>Mean</b>
Pro forma financial statements (e.g., cash flow, income statement and budget)	4.60
Cost-benefit analysis	4.54
Benchmarking	4.41
Gap analysis	4.30
Balanced scorecard	4.24
SWOT analysis	4.10
Value chain analysis	3.82
Spreadsheet “what if” analysis	3.74
Porter’s five forces analysis	3.70
Portfolio analysis (e.g., Boston consulting matrix or General Electric matrix)	3.54
PEST (Political, Economic, Social and Technological) analysis	3.53

N = 182

### 5.2.9 Tools Used in Developing Strategic Plans (by Organizational Size)

Similarly, regarding the number of employees, there is a high degree of agreement in the results shown in Table 43 between the whole sample and the subsamples. In general, the eleven tools listed above clearly exceed the median measure, i.e., pro forma financial statements (e.g., cash flow, income statement and budget), cost–benefit analysis, benchmarking, Gap analysis, Balanced Scorecard, Value chain analysis, Spreadsheet “what if” analysis, SWOT analysis, PEST (Political, Economic, Social and Technological analysis), Portfolio analysis and Porter’s five forces analysis. As mentioned earlier, this also reflects a high degree of awareness in Abu Dhabi’s semi-government sector of these strategic planning tools. Moreover, the eleven tools clearly exceed the median measure regardless of the size of organization in terms of the number of employees.

Table 43: Strategic Planning Tools Used (by Organizational Size)

		<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error</b>
Pro forma financial statements (e.g., cash flow, income statement and budget)	Fewer than 100 Employees	15	4.46	0.74	0.19
	100-249 Employees	36	4.66	0.71	0.11
	250-499 Employees	31	4.48	0.88	0.15
	500-999 Employees	31	4.51	0.62	0.11
	More than 1000 Employees	69	4.69	0.60	0.07
	Total	182	4.60	0.69	0.05
Cost-benefit analysis	Fewer than 100 Employees	15	4.93	0.25	0.06
	100-249 Employees	36	4.61	0.76	0.12
	250-499 Employees	31	4.19	0.74	0.13
	500-999 Employees	31	4.22	0.56	0.10
	More than 1000 Employees	69	4.71	0.54	0.06
	Total	182	4.53	0.66	0.04
Benchmarking	Fewer than 100 Employees	15	4.66	0.72	0.18
	100-249 Employees	36	4.41	0.55	0.09
	250-499 Employees	31	4.00	0.81	0.14
	500-999 Employees	31	3.87	0.76	0.13
	More than 1000 Employees	69	4.78	0.48	0.05
	Total	182	4.41	0.72	0.05
Gap analysis	Fewer than 100 Employees	15	4.66	0.72	0.18
	100-249 Employees	36	4.50	0.77	0.12
	250-499 Employees	31	3.90	0.90	0.16
	500-999 Employees	31	3.64	0.95	0.17
	More than 1000 Employees	69	4.59	0.55	0.06
	Total	182	4.30	0.84	0.06
Balanced scorecard	Fewer than 100 Employees	15	3.60	1.05	0.27
	100-249 Employees	36	4.16	0.94	0.15
	250-499 Employees	31	4.03	0.87	0.15

		<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error</b>
	500-999 Employees	31	3.67	0.94	0.16
	More than 1000 Employees	69	4.75	0.52	0.06
	<b>Total</b>	<b>182</b>	<b>4.23</b>	<b>0.91</b>	<b>0.06</b>
Value chain analysis	Fewer than 100 Employees	15	3.13	0.83	0.21
	100-249 Employees	36	3.69	1.00	0.16
	250-499 Employees	31	3.67	0.83	0.14
	500-999 Employees	31	3.80	0.79	0.14
	More than 1000 Employees	69	4.10	0.95	0.11
	<b>Total</b>	<b>182</b>	<b>3.81</b>	<b>0.94</b>	<b>0.06</b>
Spreadsheet “what if” analysis	Fewer than 100 Employees	15	3.66	1.11	0.28
	100-249 Employees	36	3.52	0.97	0.16
	250-499 Employees	31	3.38	0.88	0.15
	500-999 Employees	31	3.38	1.49	0.26
	More than 1000 Employees	69	4.17	0.72	0.08
	<b>Total</b>	<b>182</b>	<b>3.73</b>	<b>1.04</b>	<b>0.07</b>
SWOT analysis	Fewer than 100 Employees	15	4.00	0.75	0.19
	100-249 Employees	36	4.13	0.89	0.14
	250-499 Employees	31	4.00	1.06	0.19
	500-999 Employees	31	3.22	1.54	0.27
	More than 1000 Employees	69	4.55	0.77	0.09
	<b>Total</b>	<b>182</b>	<b>4.10</b>	<b>1.10</b>	<b>0.08</b>
PEST (Political, Economic, Social and Technological) analysis	Fewer than 100 Employees	15	4.13	1.12	0.29
	100-249 Employees	36	3.16	1.15	0.19
	250-499 Employees	31	3.22	1.11	0.20
	500-999 Employees	31	3.12	1.60	0.28
	More than 1000 Employees	69	3.91	1.31	0.15
	<b>Total</b>	<b>182</b>	<b>3.53</b>	<b>1.34</b>	<b>0.09</b>
Portfolio analysis (e.g., Boston consulting)	Fewer than 100 Employees	15	3.26	1.16	0.30

		<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error</b>
matrix or General Electric matrix)	100-249 Employees	36	3.80	0.92	0.15
	250-499 Employees	31	3.61	0.88	0.15
	500-999 Employees	31	3.64	1.08	0.19
	More than 1000 Employees	69	3.37	1.41	0.17
	<b>Total</b>	<b>182</b>	<b>3.53</b>	<b>1.17</b>	<b>0.08</b>
Porter's five forces analysis	Fewer than 100 Employees	15	3.80	0.56	0.14
	100-249 Employees	36	3.91	0.87	0.14
	250-499 Employees	31	3.41	0.88	0.15
	500-999 Employees	31	3.87	0.99	0.17
	More than 1000 Employees	69	3.60	1.39	0.16
	<b>Total</b>	<b>182</b>	<b>3.69</b>	<b>1.10</b>	<b>0.08</b>

The mean is an average on a scale of 1 strongly disagree to 5 strongly agree.

#### **5.2.10 Tools Used in Developing Strategic Plans (by Ownership)**

Finally, regarding the type of ownership, there is a high degree of agreement in the results shown in Table 44 between the whole sample and the subsamples. In general the eleven tools clearly exceed the median measure, i.e., pro forma financial statements (e.g., cash flow, income statement and budget), cost-benefit analysis, benchmarking, Gap analysis, Balanced Scorecard, Value chain analysis, Spreadsheet “what if” analysis, SWOT analysis, PEST (Political, Economic, Social and Technological analysis), Portfolio analysis and Porter’s five forces analysis. As noted above, this also reflects a high degree of awareness in Abu Dhabi’s semi-government sector of these strategic planning tools. Moreover, the eleven tools clearly exceed the median measure, regardless of the type of ownership.

Table 44: Strategic Planning Tools Used (by Ownership)

		<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error</b>
Pro forma financial statements (e.g., cash flow, income statement and budget)	0% Foreign Ownership	69	4.31	0.88	0.10
	1-25 % Foreign Ownership	82	4.79	0.46	0.05
	26-49% Foreign Ownership	31	4.74	0.51	0.09
	Total	182	4.60	0.69	0.05
Cost-benefit analysis	0% Foreign Ownership	69	4.37	0.84	0.10
	1-25 % Foreign Ownership	82	4.60	0.49	0.05
	26-49% Foreign Ownership	31	4.70	0.52	0.09
	Total	182	4.53	0.66	0.04
Benchmarking	0% Foreign Ownership	69	4.42	0.82	0.09
	1-25 % Foreign Ownership	82	4.50	0.70	0.07
	26-49% Foreign Ownership	31	4.16	0.45	0.08
	Total	182	4.41	0.72	0.05
Gap analysis	0% Foreign Ownership	69	4.30	0.84	0.10
	1-25 % Foreign Ownership	82	4.17	0.87	0.09
	26-49% Foreign Ownership	31	4.64	0.66	0.11
	Total	182	4.30	0.84	0.06
Balanced scorecard	0% Foreign Ownership	69	3.86	0.98	0.11
	1-25 % Foreign Ownership	82	4.34	0.83	0.09
	26-49% Foreign Ownership	31	4.77	0.56	0.10
	Total	182	4.23	0.91	0.06
Value chain analysis	0% Foreign Ownership	69	3.72	1.06	0.12
	1-25 % Foreign Ownership	82	3.97	0.83	0.09
	26-49% Foreign Ownership	31	3.61	0.88	0.15
	Total	182	3.81	0.94	0.06

		<b>N</b>	<b>Mean</b>	<b>Std. Deviation</b>	<b>Std. Error</b>
Spreadsheet “what if” analysis	0% Foreign Ownership	69	3.97	0.95	0.11
	1-25 % Foreign Ownership	82	3.69	1.12	0.12
	26-49% Foreign Ownership	31	3.32	0.90	0.16
	Total	182	3.73	1.04	0.07
SWOT analysis	0% Foreign Ownership	69	4.14	0.98	0.11
	1-25 % Foreign Ownership	82	4.09	1.31	0.14
	26-49% Foreign Ownership	31	4.03	0.70	0.12
	Total	182	4.10	1.10	0.08
PEST (Political, Economic, Social and Technological) analysis	0% Foreign Ownership	69	4.01	0.97	0.11
	1-25 % Foreign Ownership	82	3.42	1.46	0.16
	26-49% Foreign Ownership	31	2.74	1.29	0.23
	Total	182	3.53	1.34	0.09
Portfolio analysis (e.g., Boston consulting matrix or General Electric matrix)	0% Foreign Ownership	69	3.71	1.08	0.13
	1-25 % Foreign Ownership	82	3.31	1.29	0.14
	26-49% Foreign Ownership	31	3.74	0.92	0.16
	Total	182	3.53	1.17	0.08
Porter’s five forces analysis	0% Foreign Ownership	69	3.86	0.96	0.11
	1-25 % Foreign Ownership	82	3.39	1.28	0.14
	26-49% Foreign Ownership	31	4.12	0.56	0.10
	Total	182	3.69	1.10	0.08

The mean is an average on a scale of 1 strongly disagree to 5 strongly agree.

### 5.3 Hypotheses Testing

The data were analysed using path analysis, which is a multivariate analytical methodology for empirically examining sets of relationships in the form of linear

causal models (Duncan, 1986; Li, 1975). The aim of path analysis is to examine the direct and indirect effects of each hypothesis on the basis of knowledge and theoretical constructs (Pedhazur, 1982). Path analysis does not establish causal relations with certainty, but is used for quantitative interpretations of possible causal relationships (Borchgrevink and Boster, 1998). A path diagram represents the proposed antecedents and consequents among the variables in the model. Arrows are used to symbolize the hypothesized relationships and the direction of influence in the model. In specifying a path model, a distinction is drawn between exogenous variables and endogenous variables. The influence of exogenous variables is outside the model, while endogenous variables have influence within the model. In this case, the strategic planning processes are treated as the only exogenous variables, and organizational performance and organizational competitiveness are the endogenous variables.

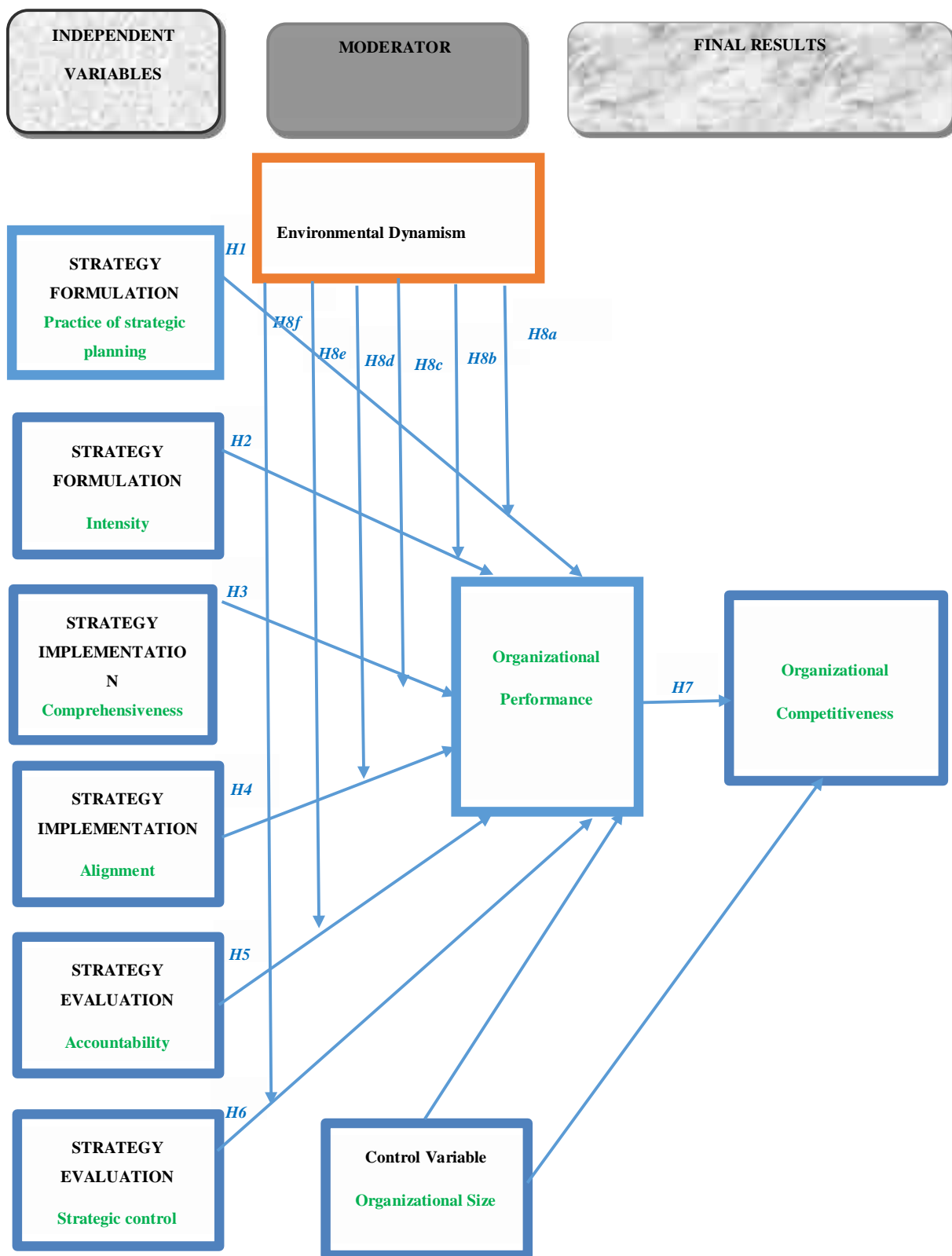
Figure 4 below depicts the proposed path diagram that reflects the relationships between the variables. The value of the path coefficient associated with each path represents the strength of each linear influence. The structural-equation-modelling package, AMOS, was used to test the hypotheses shown in the model. We used the factor scores as single item indicators and performed a path analysis, applying the maximum likelihood estimates (MLE) method, following the guidelines suggested by Joreskog and Sorbom (1982).

Before testing the model, in which all the dimensions together were considered, it is important to highlight, from a methodological point of view, that individualized analyses of each of the dimensions were made (according to the measurement model), in order to refine in advance the items used in their measurement. Having established the different measures, a confirmatory factor

analysis (CFA) was conducted. This research used both a structural model (which includes all the constructs in one model) and a measurement model (in which each construct has a separate model) (Hair et al., 2006).



Figure 4: Research Model



### 5.3.1 Measurement Models

To apply the MLE method for estimating the model, the constructs must satisfy the criterion of multivariate normality (Bagozzi & Yi, 1988). Therefore, for all the constructs, tests of normality, i.e. skewness and kurtosis (Bagozzi & Yi, 1988), were conducted. Table 45 indicates no departure from normality, since most of the results are close to one (i.e. +/- 1) (Bagozzi & Yi, 1988). Thus, once normality was confirmed for all the constructs, it was decided to proceed with the use of the maximum likelihood estimation (MLE) method to estimate the model. The reliability of the constructs was assessed by item-to-total correlations and Cronbach's alpha reliability coefficient (see Chapter 4) (Nunnally & Bernstein, 1994).

Furthermore, the analysis of Mahalanobis distance was carried out using AMOS to identify any multivariate outliers within the data. The Mahalanobis distance is a metric for estimating how far each case is from the centre of all the distributions of the variables (i.e. the centroid in multivariate space) (Mahalanobis, 1927). The Mahalanobis distance test used in the present thesis identified one case which had an outlier. However, due to the limited number of available cases it was decided to keep it (the results of the Mahalanobis distance test are listed in the appendices).

Table 45: Skewness and Kurtosis

<b>Variable</b>	<b>Skewness</b>	<b>Kurtosis</b>
Practice of Strategic Planning	-0.23	0.52
Intensity of Strategic Planning	-0.80	1.05
Comprehensiveness of Strategic Plan Implementation	-0.69	-0.72
Alignment of Strategic Plan Implementation	-0.50	0.13
Accountability	-0.87	-0.01
Strategic control	-0.07	-1.04
Organizational Performance	-0.28	-0.84
Organizational Competitiveness	-0.69	0.83
Organizational Size	-0.59	-1.09

Next, several fit statistics were used to evaluate the acceptability of each of the factor models. As recommended by Bentler and Bonnet (1980), the goodness-of-fit index was taken into account and results were deemed acceptable if above the recommended value of 0.90. Additionally, the comparative fit index (CFI) was also used and acceptable model fit was demonstrated with CFIs above 0.90. Furthermore, the adjusted goodness-of-fit index (AGFI), and the root mean square residual (RMSEA) were also provided. Standard cut-offs for the above indices, as proposed by experts (Bentler, 1990; Hu and Bentler, 1995; Joreskog and Sorbom, 1982), are provided in Table 46. The results indicated that the scales were unidimensional.

Table 46: Confirmatory Factor Analysis of Model Constructs

<b>Construct</b>	<b>Chi-Square</b>	<b>DF</b>	<b>P</b>	<b>GF I</b>	<b>AGF I</b>	<b>CFI</b>	<b>RMSEA</b>
Practice of Strategic Planning	36.06	22	.03	.96	.88	.98	0.05
Intensity of Strategic Planning	2.73	4	.60	.99	.97	.99	0.00
Comprehensiveness of Strategic Plan	2.31	3	.51	.99	.97	.99	0.00
Alignment of Strategic Plan Implementation	31.42	12	.06	.96	.88	.98	0.09
Accountability	1.30	2	.52	.99	.98	1.0	0.00
Strategic control	0.85	2	.65	.99	.98	1.0	0.00
Organizational Performance	32.6	16	.08	.96	.89	.98	0.07
Organizational Competitiveness	2.96	2	.22	.99	.96	.99	0.05
<b>Statistic</b>	<b>Suggested</b>						
Goodness-of-fit index (GFI)	≥0.90						
Adjusted goodness-of-fit index (AGFI)	≥0.80						
Comparative fit index (CFI)	≥0.90						
Root mean square residual (RMSEA)	≤0.10						
Chi-Square Significant	≥0.05						

To meet the requirements of satisfactory convergent and discriminant validity, the six strategic planning dimensions, one environmental characteristic and two organizational outcomes were tested by confirmatory factor analysis. Convergent validity describes the extent to which the indicators of a specific construct converge or share a high proportion of variance (Hair et al., 2006). Convergent validity is achieved if the average variance extracted (AVE) for a construct is greater than 0.50. Table 47 on the following page summarizes the results of the convergent validity analysis. Note that all of the scales had an acceptable convergent validity. The AVE for the Practice of strategic planning is 0.55, for the Intensity of strategic planning is 0.77, for the Comprehensiveness of strategic plan implementation is 0.84, for the Alignment of strategic plan implementation is 0.74, for Accountability is 0.76, for Strategic control

is 0.82, for Organizational performance is 0.82, for Organizational competitiveness is 0.87, and for dynamism is 0.88, all exceeding the minimum threshold of 0.5.

Meanwhile, discriminant validity is the distinctiveness of two conceptually similar constructs (Hair et al., 2006). This indicates that each construct should share more variance with its items than it shares with other constructs. Discriminant validity is present when the variances extracted by the constructs (AVE) from each construct are greater than the square of the correlations. Table 47 shows that the AVE in each case was greater than any squared correlation among the constructs (the factor scores as single item indicators were used to calculate the between-constructs correlations); this implied that the constructs were empirically distinct (Fornell & Larcker, 1981).

Table 47: Cronbach's alpha, Bivariate Correlations, and Average Variances Extracted (AVE)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Practice of Strategic Planning (1)	<b>0.55</b>								
Intensity of Strategic Planning (2)	0.231 **	<b>0.77</b>							
Comprehensiveness of Strategic Plan Implementation (3)	0.087 **	0.078 **	<b>0.84</b>						
Alignment of Strategic Plan Implementation (4)	0.251 **	0.356 **	0.298 **	<b>0.74</b>					
Accountability (5)	0.006 **	0.152 **	0.150 **	0.208 **	<b>0.76</b>				
Strategic Control (6)	0.061 **	0.289 **	0.422 **	0.219 **	0.117 **	<b>0.82</b>			
Organizational Performance (7)	0.140 **	0.078 **	0.081 **	0.137 **	0.071 **	0.113 **	<b>0.82</b>		
Organizational Competitiveness (8)	0.145 **	0.127 **	0.040 **	0.138 **	0.103 **	0.080 **	0.675 **	<b>0.87</b>	
Environmental Dynamism (9)	0.175 **	0.252 **	0.388 **	0.370 **	0.285 **	0.361 **	0.423 **	0.379 **	<b>0.88</b>
Organizational Size (10)	0.027 *	0.000	0.169 **	0.079 **	0.126 **	0.019	0.202 **	0.227 **	0.299 **
Coefficient Alpha	<b>0.83</b>	<b>0.89</b>	<b>0.92</b>	<b>0.90</b>	<b>0.85</b>	<b>0.89</b>	<b>0.90</b>	<b>0.93</b>	<b>0.93</b>
<p>*. Correlation is significant at the 0.05 level (2-tailed), **. Correlation is significant at the P&lt;0.01 level (2-tailed).            ***. Correlation is significant at the P&lt;0.01 level (2-tailed).            The diagonals represent the average variance extracted (AVE) in <b>Bold</b> and the lower cells represent the squared correlation among the constructs.</p>									

For example, the AVE of the Alignment of Strategic Plan Implementation is 0.74, which is greater than any squared correlation among the other constructs, i.e. 0.208, 0.219, 0.137, 0.138, 0.370, 0.079.

In these tests, the AVEs were found to be high, while all the standardized item loadings were statistically significant and associated with the nominated constructs.

The reliability of the strategic planning constructs that are included in the model (Strategic Planning Practice = 0.83, Strategic Planning Intensity= 0.89, Comprehensiveness of Strategic Plan Implementation = 0.92, Alignment of Strategic Plan Implementation = 0.90, Accountability = 0.85, Strategic Control = 0.89, Organizational Performance = 0.90, Organizational Competitiveness = 0.93, Environmental Dynamism = 0.93) was invariably high. In summary, the measurement model test, including convergent and discriminant validity measures, was satisfactory.

### **5.3.2 Structural-Model Testing**

Finally, given that the purpose of the study was to test the hypothesized causal relationships among the constructs of the model, we used the structural equation-modeling package, AMOS 22 (see Figure 4). The factor means were employed as single item indicators to perform path analysis, applying the maximum likelihood estimates (MLE) method, following the guidelines suggested by Joreskog & Sorbom (1982).

A more detailed analysis of the results and measures for model fit is reported in Table 48. The organizational size was used as a control variable to test its effect on performance and competitiveness. Since there is no definitive standard of fit, a variety of indices is provided in Table 48, along with their suggested values. Unlike the traditional statistical procedures, where the null hypothesis posits no relationship between the variables of interest (and thus, where researchers hope to reject it), in path (SEM) analysis, the null hypothesis posits that the research model being investigated fits the collected data well (and thus, researchers hope not to reject it). The non-significant value of the Chi-square test ( $\chi^2 = 0.11$ ) in Table 48 indicates an adequate

fit. The other fit indices, together with the squared multiple correlations, also indicate a good overall fit with the data (GFI = 0.96, CFI = 0.96, NFI = 0.95, RMSEA = 0.09, RMR=0.01). Since these indices confirm that the overall fit of the model to the data was good, it was concluded that the structural model was an appropriate basis for hypothesis testing.

Table 48: Standardized Regression Weights

Predictor variables	Criterion Variables	Hypothesized relationship	Standardized coefficient	R2
Practice of strategic planning	Organizational Performance	H1	0.071ns	0.72
Intensity of strategic planning	Organizational Performance	H2	0.211***	
Comprehensiveness of strategic plan implementation	Organizational Performance	H3	0.148***	
Alignment of strategic plan implementation	Organizational Performance	H4	0.278***	
Accountability	Organizational Performance	H5	0.275***	
Strategic Control	Organizational Performance	H6	0.273***	
Organizational Size	Organizational Performance	Control	0.253***	0.55
Organizational Performance	Organizational Competitiveness	H7	0.658***	
Organizational Size	Organizational Competitiveness	Control	0.124*	
Statistic			Suggested	Obtained
Chi-Square Significance			≥0.05	0.11
Goodness-of-fit index (GFI)			≥0.90	0.96
Comparative fit index (CFI)			≥0.90	0.96
Normed Fit Index (NFI)			≥0.90	0.95
Root Mean Square Residual (RMR)			≤0.05	0.01
Root mean square residual (RMSEA)			≤0.10	0.09

\*P<0.05, \*\*P<0.01, \*\*\*P<0.001, ns is not significant



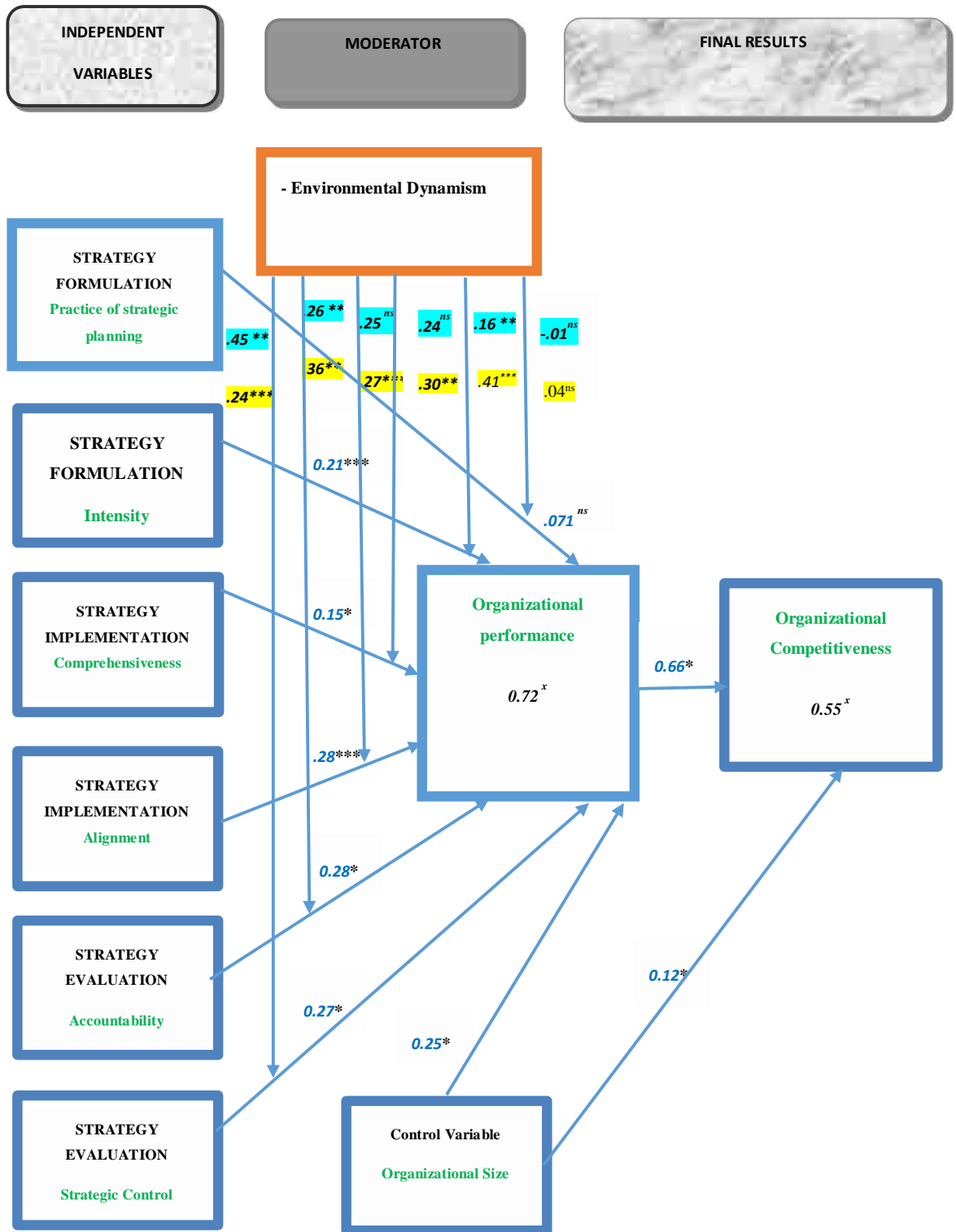
Hypothesis testing was conducted by examining the estimated standardized parameters for the causal paths, which are obtained from the output of AMOS. Table 48 shows these parameters. Apart from the Practice of Strategic Planning (H1) (Standardized Estimate=0.071, P= 0.110 which is not significant), the suggested paths positively affected organizational performance. These paths were Strategic Planning Intensity (H2) (Standardized Estimate=0.211, P< 0.001), Comprehensiveness of Strategic Plan Implementation (H3) (Standardized Estimate=0.148, P< 0.001), Alignment of Strategic Plan Implementation (H4) (Standardized Estimate=0.278, P<0.001), Accountability (H5) (Standardized Estimate=0.275, P< 0.001) and Strategic Control (H6) (Standardized Estimate=0.273, P< 0.001).

It was also found that Organizational Performance affects Organizational Competitiveness. This gives support to H7 (Standardized Estimate=0.658, P<0.001). It shows the great role played by organizational performance in determining the level of organizational competitiveness.

The results further indicate that organizational size positively affects organizational performance (Standardized Estimate=0.253, P< 0.001) and organizational competitiveness (Standardized Estimate=0.124, P<0.05). This finding is consistent with related strategy research, which argues that size can systematically affect managerial practices (Child & Mansfield, 1972); and thus justifies its use as the control variable in this study.

Figure 5 shows the results of hypotheses testing on the research model displayed in Figure 4, including the results of testing the moderation hypotheses, which are covered below.

Figure 5: Tested Model



\*P<0.05, \*\*P<0.01, \*\*\*P<0.001, ns is not significant and <sup>x</sup>Squared Multiple Correlation

### 5.3.3 Moderating Effects of Environmental Dynamism

To evaluate the moderating effects of environmental dynamism, the study followed the methodology of Zhao & Cavusgil (2006). According to them, a two-group model can be used, because it can determine whether environmental dynamism moderates the effect of the strategic planning processes on organization performance. The sample was split into two groups according to the mean score of the environmental dynamism of the participating organizations. The data above the mean (3) were defined as high and supportive environmental dynamism, and the data below the mean as low in terms of environmental dynamism. A two group AMOS model was used later to determine whether or not there was any significant difference between the structural parameters of the high environmental dynamism group and those of the low environmental dynamism group. In the first analysis, the parameter from environmental dynamism was constrained to be equal. In the second, the parameter was kept free (not constrained). Differences in the T values between the two models determined whether the degree of environmental dynamism had a moderating effect on the relationship between the strategic planning processes and organizational performance.

Table 49 shows that, for the different strategic planning dimensions, the coefficients of the high environmental dynamism score group were greater than those of the low environmental dynamism score group. The coefficient of the practice of strategic planning for the low environmental dynamism group was 0.011 (not significant,  $P > 0.05$ ) and that for the high environmental dynamism group was 0.049 (not significant,  $P > 0.05$ ). Although the environmental dynamism was hypothesized to moderate the relationship between the practice of strategic planning and organizational

performance, the results indicated that this moderation effect is insignificant ( $T = 0.27$ : the accepted level for 5% alpha  $\leq 1.96$ ). This result leads to the rejection of H8a.

The T statistic has been calculated according to the following equations (Cohen, 1983):

$$T = \frac{path_{high} - path_{low}}{SP \sqrt{\frac{1}{n_1} + \frac{1}{n_2}}}$$

$$SP = \sqrt{\frac{(n_1 - 1)^2 (S.E_1)^2 + (n_2 - 1)^2 (S.E_2)^2}{n_1 + n_2 - 2}}$$

SP: polled standard deviation

Table 49: Test moderating effect

<b>Relationship</b>	<b>Moderator</b>	<b>Hypothesis</b>	<b>Coefficient</b>	<b>T Difference</b>
Practice of strategic planning	Low environmental dynamism	H8a	0.011 <sup>ns</sup>	0.27
	High environmental dynamism		0.049 <sup>ns</sup>	
Intensity of strategic planning	Low environmental dynamism	H8b	0.163 <sup>**</sup>	1.37
	High environmental dynamism		0.410 <sup>***</sup>	
Comprehensiveness of strategic plan implementation	Low environmental dynamism	H8c	0.245 <sup>ns</sup>	.040
	High environmental dynamism		0.304 <sup>***</sup>	
Alignment of strategic plan implementation	Low environmental dynamism	H8d	0.256 <sup>ns</sup>	0.13
	High environmental dynamism		0.276 <sup>***</sup>	
Accountability	Low environmental dynamism	H8e	0.262 <sup>**</sup>	0.66
	High environmental dynamism		0.361 <sup>***</sup>	

<b>Relationship</b>	<b>Moderator</b>	<b>Hypothesis</b>	<b>Coefficient</b>	<b>T Difference</b>
Strategic control	Low environmental dynamism	H8f	0.454 **	1.39
	High environmental dynamism		0.248***	

\*P<0.05, \*\*P<0.01, \*\*\*P<0.001, ns is not significant

Using the same procedure, the moderating effect of the environmental dynamism on the relationship between the intensity of the strategic planning and organizational performance was calculated. The coefficient of the intensity of strategic planning for the low environmental dynamism group was 0.163 (significant, P<0.01) and for the high environmental dynamism group it was 0.410 (significant, P<0.001). Hence, it appears that environmental dynamism significantly moderates the relationship between the intensity of the strategic planning and organizational performance (T= 1.37: the accepted level for 5% alpha  $\leq$  1.96), supporting H8b.

However, the coefficient of the comprehensiveness of the strategic planning implementation for the low environmental dynamism group was 0.245 (not significant, P>0.05) and for the high environmental dynamism group it was 0.304 (significant, P<0.001). Hence, it appears that environmental dynamism significantly moderates the relationship between the comprehensiveness of the strategic planning implementation and organizational performance (T= 0.40: the accepted level for 5% alpha  $\leq$  1.96), supporting H8c. Similarly, the coefficient of the alignment of the strategic planning implementation for the low environmental dynamism group was 0.256 (not significant, P>0.05) and for the high environmental dynamism group it was 0.276 (significant, p<0.001). Hence, it appears that environmental dynamism significantly moderates the relationship between the alignment of the strategic planning implementation and

organizational performance ( $T = .13$ : the accepted level for 5% alpha  $\leq 1.96$ ), supporting H8d.

In line with this, the coefficient of the accountability for the low environmental dynamism group was 0.262 (significant,  $P < 0.01$ ) and for the high environmental dynamism group was 0.361 (significant,  $P < 0.001$ ). Hence, it appears that environmental dynamism significantly moderates the relationship between the accountability of strategic planning and organizational performance ( $T = 0.66$ : the accepted level for 5% alpha  $\leq 1.96$ ), supporting H8e.

Finally, the coefficient of the control of the strategic planning for the low environmental dynamism group was 0.454 (significant,  $P < 0.01$ ) and for the high environmental dynamism group was 0.248 (significant,  $P < 0.001$ ). Hence, it appears that environmental dynamism significantly moderates the relationship between control of the strategic planning and organization performance ( $T = 1.39$ : the accepted level for 5% alpha  $\leq 1.96$ ), supporting H8f.

#### **5.4 Conclusion and Summary of Findings**

This chapter reported the results of exploratory analysis of the strategic planning practices of the organizations sampled in the study and described the procedures and findings of path analysis, which was used for testing the hypotheses. The summary of the hypothesis testing is presented in Table 50 below:

Table 50: Results of Hypothesis Testing

<b>Hypotheses</b>	<b>Results</b>
H1. Practice of strategic planning (the use of strategic planning tools) is positively related to organizational performance.	Rejected
H2. Intensity of strategic planning is positively related to organizational performance.	Accepted
H3. Comprehensiveness of strategic plan implementation is positively related to organizational performance.	Accepted
H4. Alignment of strategic plan implementation is positively related to organizational performance.	Accepted
H5. Accountability is positively related to organizational performance. Accepted	Accepted
H6. Strategic control is positively related to organizational performance.	Accepted
H7. Organizational performance is positively related to organizational competitiveness.	Accepted
H8a. Environmental dynamism moderates the relationship between strategic planning practice and organizational performance.	Rejected
H8b. Environmental dynamism moderates the relationship between intensity of strategic planning and organizational performance.	Accepted
H8c. Environmental dynamism moderates the relationship between comprehensiveness of strategic plan implementation and organizational performance.	Accepted
H8d. Environmental dynamism moderates the relationship between alignment of strategic plan implementation and organizational performance.	Accepted
H8e. Environmental dynamism moderates the relationship between accountability and organizational performance.	Accepted
H8f. Environmental dynamism moderates the relationship between strategic control and organizational performance.	Accepted

## **Chapter 6: Discussion and Conclusion**

### **6.1 Introduction**

This chapter discusses the study results. It starts by addressing the results of the exploratory analysis of strategic planning practice in the sampled companies. Then it discusses the hypotheses concerning the relationships of strategic plan formulation, strategic plan implementation and strategic plan evaluation to organizational performance before reviewing the findings on the relationship between organizational performance and organizational competitiveness and addressing the findings related to the moderating effects of environmental dynamism. The chapter also highlights the implications of the study to academics and practitioners. Consecutively, the limitations of this study are discussed, and areas for future research are identified.

### **6.2 Discussion of the Research Findings**

#### **6.2.1 Exploratory Analysis of Strategic Planning Practice**

##### **6.2.1.1 Development of the First Strategic Plan**

Nearly half of the organizations studied developed their first strategic plans less than five years ago. Only 22% of the organizations developed their strategic plans more than 5 years ago. This reflects the fact that strategic planning in Abu Dhabi is still in its early stages, as confirmed by related research (Elbanna, 2013), which shows that the formal practice of strategic planning in Abu Dhabi public organizations started a decade ago.



### **6.2.1.2 Planning Horizon**

The analysis shows that the average number of years in the sample's planning horizon is 5.75 years. This time horizon is longer than the strategic planning horizon (4.2 years) found in the study by Elbanna (2013). This study also shows that most organizations developed their plans for periods of either 3 or 5 years.

### **6.2.1.3 Time needed to Prepare the Strategic Plan**

The result of this study confirms the findings of related research in the United Arab Emirates (Elbanna, 2010, 2013) that most of the sampled organizations took less than 8 months to develop strategic plans and that large organizations tend to require more time than small ones to prepare their strategic plans, since large organizations have more complex strategic planning processes.

### **6.2.1.4 Size of Strategic Planning Units**

Most of the participating organizations have 10 or fewer employees in charge of developing their strategic plans. This result is similar to the result for the study by Elbanna (2013), who found that the sampled organizations had an average of 6.5 employees involved in planning strategies.

### **6.2.1.5 Participation in the Development of Strategic Plans (by Managers/Board Members)**

CEOs/managing directors have the highest level of participation in the strategic planning process: the board of directors and the planning committees/specialists come second and third, respectively. In line with the argument

of Elbanna (2010), there is a positive link in the Arab region, including the UAE, between managerial level and the degree of participation in the strategic planning process, demonstrating that the higher the seniority, the greater the participation in the strategic planning process.

The participation of managers and members of supervisory management/lower managers tends to be lower. Interestingly, the participation of the middle managers and members of supervisory management/lower managers is high in organizations that have fewer than 100 employees. This indicates that smaller organizations tend to include middle and lower level managers in their strategic plans.

#### **6.2.1.6 Tools Used in Developing Strategic Plans**

Organizations use pro forma financial statements, cost-benefit analysis, benchmarking, gap analysis, balanced scorecard and SWOT analysis more than the other tools listed. One of the reasons for this finding may be associated with the ease with which these six tools can be prepared and used (Elbanna, 2007). Less use is made of value chain analysis, spreadsheet “what if” analysis, Porter’s five forces analysis, Portfolio analysis and PEST analysis. As noted by Elbanna (2007), this may be due to the more demanding skills required to use these tools effectively. Regardless of the size of organization, they all use the eleven tools.

## **6.2.2 Strategic Plan Formulation and Organisation Performance**

### **6.2.2.1 Practice of strategic planning and organizational performance**

The practice of strategic planning (use of strategic planning tools) is found not to be positively related to organizational performance. This result is in conflict with the predictions of the present study. The result is also inconsistent with that of Elbanna (2010), who argues that although strategic planning tools neither make strategy nor implement it, they can be used to gain new insights and understanding and to present complex issues. In fact, planning tools could play an important analytical role and serve as valuable communication tools, reducing many pages of narrative planning to one or two diagrams (Elbanna, 2010; Hussey & Hussey, 1997). Koufopoulos & Chrysochoidis, (2000) endorse these comments, pointing out that using strategic tools offers more benefits than disadvantages to the organization. Our insignificant finding about the impact of strategic planning on performance is also inconsistent with the findings in some recent meta-analyses (e.g., Brinchmann et al., 2010; McIlquham-Schmidt, 2010), which report that strategic planning is positively related to organizational performance.

One plausible explanation for these conflicting results with regard to the impact of strategic planning on firm performance may be related to the design of the present study. To be precise, this study examined the impact of strategic planning on firm performance by analysing whether firm performance is associated with using a number of strategic planning tools as a whole (e.g., experience curve analysis, value chain analysis, Porter's 5-forces analysis, SWOT analysis, etc.) However, this approach fails to ascertain whether the strategic planning tools, considered individually, affect performance.

Another explanation may be related to the fact that the investigation of the impact on firm performance of strategic planning tools as a whole was carried out along with an investigation of the moderating impact of environmental dynamism. This approach assumes that dynamism affects each planning tool in the same manner and thus fails to identify whether dynamism affects planning tools and their impact on performance differently.

Taken together, these two reasons suggest that examining the moderating impact of environmental dynamism on the relationship between strategic planning tools viewed as a whole and performance may not be the proper way to investigate the association between strategic planning and organizational performance. Thus, further research could seek to distinguish the strategic planning tools from one another and investigate separately the impact of each one on organizational performance, bearing in mind the moderating role of environmental dynamism. This may help to explain the missing moderating role of environmental dynamism on the link between strategic planning practice and performance.

Finally, the unfamiliarity of the strategy formulators with planning tools may also explain the inconsistent findings reported in this study and earlier ones with regard to the impact of strategic planning on firm performance. As pointed out above in this chapter, our data suggest that strategic planning in Abu Dhabi is still in its early stages, a finding which is also put forward in Elbanna (2013). Therefore, it may be the case that the strategy formulators in the organizations in our sample do not yet have the necessary knowledge and skills to use strategic planning tools properly. If so, the reason for our finding that strategic planning does not impact on firm performance may be that the sampled organizations in our study have not yet built up the knowledge

and skills to use the planning tools properly but not that strategic planning has no effect on performance.

#### **6.2.2.2 Intensity of Strategic Planning and Organizational Performance**

The intensity of strategic planning is found to be positively related to organizational performance. This finding is consistent with the findings of several studies (e.g., (Mohd, Idris, & Momani, 2013). Chavunduka, Chimunhu, and Sifile (2015), for example, reported that strategic planning intensity positively influences firm performance amongst mining firms. Similarly, Hopkins and Hopkins (1997) found that the intensity with which banks engage in the strategic planning process has a direct positive effect on banks' financial performance.

Our finding that planning intensity enhances organizational performance confirms our reasoning that intensity helps managers to better understand their environment (Miller, Burke, and Glick (1998) and become more capable and effective in judging the environment's potential effect on their organization, thereby ensuring more effective decision making (Snizek, 1992). Similarly, with higher intensity, managers learn to base their strategic plans on relatively complete information on environmental opportunities and threats (Elbanna, 2012), so as to generate and evaluate a number of options (Menon, Bharadwaj, Adidam, & Edison, 1999; Slotegraaf & Dickson, 2004), and to avoid their own cognitive biases (i.e., systematically deviating from good judgment (Tversky & Kahneman, 1974) in making decisions. The consequence is that having intensive planning helps decision makers to deal effectively with the inherent complexity of the strategic decision making process

(Hakimpoor, 2014) and to coordinate strategic actions and achieve better organizational performance and effectiveness (Andersen (2004).

Our finding may also suggest that planning intensity positively affects organizational performance because it sends strong signals to the members of the organization and increases the attention that they pay to the planning process (Schäffer and Willauer (2003), which will eventually increase the effectiveness of the planning process, and in turn enhance organizational performance.

### **6.2.3 Strategic Plan Implementation and Organisational Performance**

#### **6.2.3.1 Comprehensiveness of Strategic Plan Implementation and Organizational Performance**

The results of this study support the argument that the comprehensiveness of strategic plan implementation is positively related to organizational performance. This finding is consistent with related research which shows that comprehensiveness positively contributes to superior organizational outcomes. In a recent study involving 231 public organizations in the UAE, for example, (Elbanna & Fadol, 2016) found that the comprehensiveness of strategy implementation has a significant positive effect on strategic planning effectiveness, which is positively associated with performance (Veliyath and Shortell, 1993). Similarly, our finding supports that of Hickson, Miller, and Wilson (2003), who argued in their study of 55 cases of decision implementation, that organizations can use two approaches to implementation (i.e., readiness-based and experience-based) and found that each approach is associated with enhanced performance.

The reason behind the positive relationship between comprehensiveness and organizational performance may be similar to that behind the positive relationship between planning intensity and organizational performance. More specifically, our finding may suggest that comprehensiveness allows implementers to deal effectively with the inherent complexity of the implementation process (Hakimpoor, 2014) and reduces decision makers' cognitive biases during this process (Tversky & Kahneman, 1974), leading to better implementation practices. Furthermore, the comprehensiveness of planning implementation may be positively related to performance because it may enhance the motivation among decision makers to implement (Miller, 2008).

#### **6.2.3.2 Alignment of Strategic Plan and Organizational Performance**

The alignment of strategic plan implementation is found to be positively related to organizational performance. This result confirms that aligning organizational factors with strategy allows organizations to achieve superior performance (Slater & Olson, 2000). As discussed earlier, among the organizational factors that need to be aligned may be Higgin's (2005) 8Ss elements (i.e., Strategy and Purposes, Structure, Systems and Processes, Leadership Style, Staff, reSources, Shared Values and Strategic Performance) or the 5Ps elements of Pryor, Anderson, Toombs, and Humphreys (2007), who claimed that the proper alignment of organizational Purpose, Principles, Processes, and People is necessary for successful implementation and good Performance.

In a broader sense, our findings indicate that organizations need to align different aspects of organizational activities at organizational, interpersonal and

individual levels. At the organizational level, aligning strategy, structure and control can create an environment that is conducive to implementation success. At an interpersonal level, shared understanding among implementation managers is also critical to organizations. At the individual level, alignment means that managers who are involved in strategic planning should be committed to strategy (Noble, 1999).

## **6.2.4 Strategic Plan Evaluation and Organisational Performance**

### **6.2.4.1 Accountability and Organizational Performance**

The findings of this research showed that accountability is positively related to organizational performance. This is consistent with previous arguments. For example, Dubnick (2005) suggests that accountability leads to superior performance. This effect occurs because accountability requires organizations to establish performance standards, use these standards to evaluate the outcomes of implementation activities (i.e., of strategic plans), and identify the sources of problems so that corrective actions can be taken. When viewed from this perspective, accountability eventually leads to superior performance.

Another plausible explanation for the positive effect of accountability on organizational performance is that accountability requires the disclosure of nonfinancial quantitative information to show how well an organization is fulfilling its mission (Herzlinger, 1995; Oakes & Young, 2008).; and thus, promotes transparency and openness (Schedler, Diamond, & Plattner, 1999); justice (Ambos, 2000); ethical behaviour (Dubnick, 2003); and learning in pursuit of continuous improvement. Taken together, all these outcomes of accountability should lead to improved organizational performance.



Our result also seems to support the argument that accountability promotes careful and critical managerial thinking because it makes managers responsible for their (poor) decisions. As suggested by Cavalluzzo and Ittner (2004), when managers are held accountable for results, they are more likely to make decisions accurately and carefully, thus improving performance.

#### **6.2.4.2 Strategic Control and Organizational Performance**

Consistent with the prediction of this study, strategic control is found to be positively related to organizational performance. This finding provides support for the reasoning behind our prediction. More specifically, our finding seems to support our argument that strategic control positively affects organizational performance by enhancing organizational capabilities (i.e., capabilities for market orientation, entrepreneurship, innovativeness, and organizational learning) (Chenhall, Kallunki, & Silvola, 2011; Morris, Allen, Schindehutte, & Avila, 2006).

Our finding also seems to support our reasoning that strategic control enhances performance because it helps managers to exercise effective control over organizational members, including middle management, and make efficient decisions (Berry, Coad, Harris, Otley, & Stringer, 2009; Elbanna & Fadol, 2016). In this way, strategic control could ensure that the behaviours and decisions of organizational members are in alignment with the organizational objectives (Flamholtz, Das, & Tsui, 1985), minimizing the deviations from strategic objectives (Goold & Quinn, 1990) and leading to superior performance.

### **6.2.5 Organisational Performance and Organisational Competitiveness**

Our results supported the hypothesis of this study that organizational performance is positively related to organizational competitiveness. This lends empirical support to the arguments offered by many authors (Hauc & Kovač, 2000). For instance, Hauc and Kovač (2000) indicate that combining prompt and effective strategies with a correct and quick strategy formulation generates better competitiveness. When organizations perform better than their competitors, their competitiveness is higher. This result also suggests that, in order to improve organizational competitiveness, organizations can put effort into enhancing the aspects that lead to better performance, such as strategic planning.

### **6.2.6 Environmental Dynamism**

#### **6.2.6.1 Strategic Planning Practice**

Our study suggested that environmental dynamism does not moderate the effects of strategic planning practice (use of strategic planning tools) and organizational performance. This contradicts the prediction of this study. A possible interpretation is that using a specific strategic planning tool may or may not have a positive impact on organizational performance. In theory, some strategic planning tools might have a stronger influence on organizational performance under high environmental dynamism, while some strategic planning tools might have a weak influence on organizational performance. When discussing the use of strategic planning tools and organizational performance, the total effect may not vary, despite different environmental conditions. Thus, further research could seek to separate the strategic planning tools from one another and investigate the impact of each on

organizational performance, bearing in mind the moderating role of environmental dynamism. This may help to explain the missing moderating role of environmental dynamism on the link between strategic planning practice and performance.

#### **6.2.6.2 Intensity of Strategic Planning**

Our findings supported the moderating role of environmental dynamism on the relationship between the intensity of the strategic planning and organizational performance. Previous studies proposed different opinions on the moderating role of environmental dynamism (Elbanna, 2006; Shepherd & Rudd, 2014). Some researchers have argued that planning is more likely to achieve positive economic effects in relatively stable environments where future conditions are easier to project (Daft, 2012; Mintzberg, 1973). However, the results of our study are consistent with the argument of Andersen (2004) that planning encourages adaptive strategic thinking and facilitates the generation of new actions that could be particularly useful in dynamic industries; thus the intensity of strategic planning will allow managers to make better and wiser decisions, in turn increasing the organizational performance.

##### **6.2.6.2.1 Comprehensiveness of the strategic plan implementation**

Consistent with the argument of this study, environmental dynamism moderates the effects of the comprehensiveness of strategic plan implementation and organizational performance. Some researchers have argued that in a high dynamic environment, comprehensiveness does not lead to improved performance (Fredrickson & Mitchell, 1984). Comprehensiveness is associated with performance only in a relatively certain environment (Fredrickson & Mitchell, 1984). This is consistent with

the research of Atuahene-Gima and Murray (2004), in which the authors indicate that the relationship between comprehensiveness and firm performance is complex and contingent upon implementation speed, technological uncertainty and market uncertainty. They find that strategy comprehensiveness positively influences performance when it is combined with implementation speed, and diminishes performance when market uncertainty is high. Similarly, Miller (2008) also suggests that in turbulent environments, decision implementation is particularly difficult. Strong commitment to implementation is critical in such a setting. High decision effort (comprehensiveness) enhances commitment. The present study supports this causal process by showing that decision effort at the strategic level is positively related to firm performance in turbulent settings. Therefore, it is likely that high levels of comprehensiveness enhance implementation commitment, thereby serving the underlying goals of effective strategy and strong financial performance.

#### **6.2.6.2.2 Alignment of strategic plan implementation**

The results of this study suggest that environmental dynamism moderates the effect of the alignment of strategic plan implementation on organizational performance. In highly dynamic environments, organizations become more complex and dynamic and they seek to innovate to deliver high-quality services and products cheaper and faster (Santa, Vemuri, Ferrer, Bretherton, & Hyland, 2010). According to Bessant and Boer (2002), recent developments in society, markets, technology and industry suggest that leading organizations need to align the processes, procedures, people, technologies and organizational arrangements that will allow them to become continuously innovative. Therefore, in order to perform better, organizations, like employees at different levels, must have a deep commitment to achieve quality in their

day-to-day operations, in particular when the environment is dynamic. Organizations must also keep all the dimensions (processes, procedures, people, technologies and organizational arrangements) in alignment to maximize the probability of achieving team success and avoid conflicts.

#### **6.2.6.2.3 Accountability**

Managers who are highly accountable for their actions have more pressure to work effectively and efficiently. As environmental conditions change, managers take initiatives in order to increase the effectiveness of their responsive actions to the dynamic circumstances, as a way to enhance organizational efficiency (Andersen, 2004). This reasoning is particularly forceful in dynamic environments where market conditions often change in unexpected ways.

#### **6.2.6.2.4 Strategic control**

This study confirms that environmental dynamism moderates the effects of strategic control on organizational performance. Davila, Foster, and Oyon (2009) conclude that controls can assist intelligence gathering, which requires established processes; idea recognition, which requires a structured process to move ideas from any person in the organization to the people with resource allocation rights; and idea selection which is enhanced by formal portfolio management tools. Strategic controls, by way of internal auditing, can be used to overcome the potential drift from planned activities. In highly turbulent environments, organizations face more new challenges and are more likely to drift from planned activities. Strategic control enables

organizations to focus resources on the critical areas of the business, thus positively influencing organizational performance.

### **6.3 Theoretical Contributions of the Study**

The aim of this research was to enrich the knowledge of strategic planning processes. As Grant (2003) noted, there is an abundance of strategic planning literature, but in reality we still know very little about what happens behind closed doors.

Our findings extend the strategic management field in a number of ways. First, this study contributes significantly to the knowledge of the nature and dimensions of the strategic management process. The current literature discusses the individual relationships between firm performance and strategy formulation, implementation, and evaluation and control (with most focus on formulation) (Elbanna, 2010; Elbanna et al., 2015). This study is one of the few studies that integrates the three components of the strategic management process in one framework and examines their impact on organizational performance, promising the development of a more detailed model of the strategic management process.

Second, the current research on the strategic management process has mainly been conducted in the private (Elbanna, Thanos, & Colak, 2014; Hakimpour, 2014) and public sectors (Elbanna et al., 2015; Elbanna & Child, 2007). By investigating the three elements of the strategic management process in the semi-government sector, this study adds to the existing but limited knowledge in this less researched area.

Third, this study also explores the moderating role of environmental dynamism in the link between strategic plan formulation, implementation, evaluation and organizational performance. More specifically, our findings suggest that, with the exception of strategic planning practice, the moderating effects of environmental dynamism on the links between the intensity of strategic plan, comprehensiveness of strategic plan implementation, alignment of strategic plan implementation, accountability, strategic control and organizational performance are supported.

Fourth, this study extends current research by conducting a study in an Arab country (Elbanna et al., 2015). While much is known of the practices of management in Western countries, comparatively little is known about their equivalents in Arab countries (Elbanna, 2008, 2010). The present study addressed this gap in the literature by reporting the results of a study on strategic planning in the United Arab Emirates (UAE), Abu Dhabi in particular.

#### **6.4 Implications of the Study**

On a practical note, our study has a number of implications for managers and policy makers in the UAE semi-governmental sector in general and that of Abu Dhabi in particular.

First, having discovered that organizational performance is a function of strategic plan formulation, organizations should pay attention to choosing the strategic planning tools that best fit their needs and should plan intensively. This is an important implication for the people responsible for strategic planning practice in the semi-government sector of Abu Dhabi. In other words, the message is: The harder organizations practice strategic planning, the better their performance will be.

Second, our results highlight the importance of ensuring that planned strategic decisions are effectively executed. No matter how sound the formulated strategies are, organizations will not benefit if they are implemented incorrectly (Aldehayyat, Al Khattab, & Anchor, 2011). While many managers commonly make statements to the effect that “execution is everything”, in practice managers often allocate significantly more time and attention to formulating strategic decisions than to planning and following through their implementation (Bossidy, Charan, & Burck, 2002; Rosier, Morgan, & Cadogan, 2010). Our study further draws attention to the importance of strategy implementation and calls for managers’ attention to this area of work. As argued by Nutt (1999), most strategic changes fail because of bad implementation. An increasing number of authors have sought to bring the attention of managers to the importance of implementation which policy makers and top managers in the sampled organizations should be aware of in their actions (Elbanna, Thanos, & Colak, 2014).

Third, this study suggests that strategy evaluation is positively related to organizational performance. If it is, then to achieve high performance on the part of their organizations, top managers must have a strong sense of accountability and effectively practice strategic control. This element of strategic management practice still receives less attention from both scholars and managers than strategy formulation and implementation do. So, the results of this study remind both scholars and practitioners of the critical role that strategy evaluation can play in organizational performance.

Fourth, since the thesis finds that environmental dynamism positively moderates the relationship between the intensity of strategic planning, comprehensiveness of the strategic plan’s implementation, alignment of the strategic



plan's implementation, accountability, strategic control and organizational performance, decision makers in organizations should give enough attention to the environment in which their organizations are working and act accordingly. This is of particular importance in the UAE and the Arab Middle East in general because this troubled region of the world is highly turbulent.

Fifth, our findings are of special importance to the organizations operating in the Abu Dhabi context. Strategic planning can help the Abu Dhabi semi-government organizations to plan effectively and strategically, and thereby to perform better. This finding is timely for policy makers and executives of the semi-government sector in Abu Dhabi at present, now that they are working to diversify the economy of this important emirate into non-oil activity. Strategic management practices are at the heart of this transformation process and one of its main drivers.

## **6.5 Limitation and Suggestions for Future Research**

We should recognize that this study has several limitations, which provide some suggestions for future research.

First, as with other research done in this area, our study used a simple cross-sectional design. This type of study cannot allow researchers to make more rigorous inferences about the causal relationships implied by the model. Therefore, future research could undertake a longitudinal study to capture the dynamic relationships of strategic planning effects. Longitudinal studies produce data that show a dynamic view of the way that variables and the relationships between variables change over time. In longitudinal studies, researchers can make more rigorous inferences about the causal relationship between the strategy planning processes and organizational performance.

Second, the context of the present study is semi-government organizations in Abu Dhabi. There are some differences between Abu Dhabi and the other emirates in the UAE and between it and other developing and developed countries. Such differences restrict the generalizability of our conclusions. In addition, the strategic planning activities of semi-government organizations may be different in other types of organization. Hence, the findings of this study cannot be generalized to apply to all types of organization or extended to other emirates in the UAE or to other countries. This opens the door to replicating and extending this research to other sectors and countries. Future researchers may also compare their findings from other sectors and countries with the findings in this study.

Third, in terms of the moderating effect, further studies could also investigate the significance and relative importance of other environmental factors which are not considered in this study. This study focuses only on discussing environmental dynamism. Other environmental factors, such as perceived environmental munificence and complexity, could be examined for their impact on the relationship between strategic planning and organizational performance.

Fourth, data were collected in several cases from respondents with lower managerial positions and less than five years' experience in their current organizations. Although each respondent was given guidelines to complete the survey and part of these guidelines related to his/her familiarity with strategic planning practices in the organization to allow the respondents to identify whether or not they were eligible to complete the survey, this limitation should be taken into account when interpreting the study results and conducting related research in the future.

Fifth, researchers can integrate formal and informal strategic planning into this study. More specifically, future research could examine whether formal strategic planning impacts organizational performance differently from informal. Researchers can also examine the impact on strategy implementation of blending formal strategic planning with logical incrementalism and search for the optimal approach to using them in practice, which may further develop management theory (Elbanna et al., 2015; Elbanna & Child, 2007).

Sixth, it would benefit future research to carefully consider other factors that may influence the relationship between strategy planning formulation (or between the two other components of the strategic management process; namely, implementation and evaluation and control) and organizational performance, since this relationship is largely influenced by a host of variables, some reasonably controllable by semi-government organizations (for example, organizational capabilities, systems and processes) and others mostly beyond their control (for example, economic conditions and political instability).

Seventh, future research can use ANOVA to compare the strategy planning process (or the implementation and evaluation and control processes) across organizations of different sizes, in different industries and at different stages of strategy planning (or implementation, or evaluation and control).

Last, the dimensions of strategic plan formulation, implementation, and evaluation are limited to certain aspects. Further research could explore the other dimensions of strategic plan formulation, implementation and evaluation, and could investigate their relationship with organizational performance.

## **6.6 Conclusions**

This study addressed three objectives, first to understand the dimensions of strategic plan formulation, implementation and evaluation; second, to examine the relationship between strategic plan formulation, implementation and evaluation and organizational performance; and third, to examine the moderating role of environmental dynamism. Several applications of the research were discussed in this chapter, which also detailed the limitations of this study and a number of avenues for future research. Future researchers could substitute a longitudinal study and collect data from multiple respondents. Future research could focus on identifying other dimensions of strategic plan formulation, implementation and evaluation. Further study could also discuss the moderating role of environmental complexity and munificence. In conclusion, however, this study has provided some useful insights into the nature and practice of strategic planning in the semi-government sector in the rich emirate of Abu Dhabi. It is hoped that this study will draw further attention to and act as a springboard for ongoing research in this important, yet under-researched domain.

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## Appendix A



### **Determinants of Organizational Performance in the Semi-Government Sector of Abu Dhabi: Strategic Management Perspective**

**Dear Executive:**

This study is conducted by Bakheet Al Katheeri, a DBA student at the UAEU, to investigate the determinants of organization performance from a strategic perspective.

We invite you to participate in this study. The study is designed to help managers of semi-government sector firms better understand strategic planning practices and how they can contribute to enhance the performance of these firms. A summary report of the results will be available to all participants. Please indicate your interest by providing us with your email below.

Email: \_\_\_\_\_

Your participation is critical for the success of this study. Please be assured that your responses will be held strictly confidential. Only aggregated results will be reported, with no references made to individual responses, respondents, or companies.

If you have questions regarding this study, please do not hesitate to contact the researcher directly (as per contact information below).

Thank you in advance for your valuable contribution to this important and timely study.

**Bakheet Al Katheeri**

bakheet.alkatheeri@mubadalapetroleum.com

## Appendix B

### SECTION A - 7 STRATEGIC PLAN FORMULATION

<i>Q.1. Please tell us how often the following tools are used in developing your strategic plans.</i>						
If you are not familiar with any tool(s), please, check the last column (Not familiar with).						
	Never	Seldom	Some-times	Often	Always	Not familiar with
1.1. <i>Pro forma</i> financial statements (e.g., cash flow, income statement and budget)	1	2	3	4	5	6
1.2. Cost- benefit analysis	1	2	3	4	5	6
1.3. Benchmarking	1	2	3	4	5	6
1.4. Gap analysis	1	2	3	4	5	6
1.5. Balanced scorecard	1	2	3	4	5	6
1.6. Value chain analysis	1	2	3	4	5	6
1.7. Spreadsheet “what if ” analysis	1	2	3	4	5	6
1.8. SWOT analysis	1	2	3	4	5	6
1.9. PEST (Political, Economic, Social and Technological) analysis	1	2	3	4	5	6
1.10. Portfolio analysis (e.g., Boston consulting matrix or General Electric matrix)	1	2	3	4	5	6
1.11. Porter's five forces analysis	1	2	3	4	5	6

***Q.2. To what extent do you agree or disagree with each one of the following statements about the planning process in your organization?***

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither Disagree Nor Agree</b>	<b>Agree</b>	<b>Strongly Agree</b>
2.1. Everything that has to be planned is studied carefully during the process of strategic planning.	1	2	3	4	5
2.2. During the process of strategic planning, we analyse each decision very carefully.	1	2	3	4	5
2.3. During the process of strategic planning, many alternatives are evaluated carefully.	1	2	3	4	5
2.4. Those who are involved in strategic planning analyse and evaluate projects carefully.	1	2	3	4	5
2.5. Strategic planning is a very demanding process.	1	2	3	4	5
2.6. Those who are involved in strategic planning spare no effort.	1	2	3	4	5

## SECTION B - STRATEGIC PLAN IMPLEMENTATION

*Q.3. To what extent do you agree or disagree with each one of the following statements to best describe the current situation of strategic plan implementation at your organization?*

	Strongly Disagree	Disagree	Neither Disagree Nor Agree	Agree	Strongly Agree
3.1. We use a diverse set of ideas from internal and external sources (rather than from limited internal sources) in implementing our strategic plan.	1	2	3	4	5
3.2. We evaluate thoroughly each possible action before implementing our strategic plan.	1	2	3	4	5
3.3. We attempt to determine optimal courses of action for how to best implement our strategic plan.	1	2	3	4	5
3.4. We use the experiences of managers from different management levels while implementing our strategic plan.	1	2	3	4	5
3.5. We search extensively for possible implementation actions before we actually implement our strategic plan.	1	2	3	4	5

**Q.4. Please identify to what extent you agree or disagree with each one of the following statements in to the current situation within your organization.**

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither Disagree Nor Agree</b>	<b>Agree</b>	<b>Strongly Agree</b>
4.1. Our people have the necessary skills to implement our strategic plan effectively.	1	2	3	4	5
4.2. When our people don't have the necessary skills for implementing our strategic plan, we hire new staff with the necessary skills.	1	2	3	4	5
4.3. Our systems and processes (e.g., reward systems, manufacturing processes, information systems, etc.) are aligned to make our strategic plan work.	1	2	3	4	5
4.4. We have formal assignment of organizational specializations, authority and responsibility.	1	2	3	4	5
4.5. Our organizational culture (e.g., values that are shared by employees) is in alignment with our strategic plan.	1	2	3	4	5
4.6. The behaviors/decisions of our managers are consistent with the requirements of our strategic plan.	1	2	3	4	5



4.7. We allocate the resources (e.g., money, technology, staff, etc.) that are necessary to support our strategic plan.	1	2	3	4	5
4.8. We plan and decide according to our established strategic plan.	1	2	3	4	5

### SECTION C - STRATEGIC PLAN EVALUATION

*Q.5. To what extent do you agree or disagree with each of the following statements regarding internal accountability practices in your organization?*

	Strongly Disagree	Disagree	Neither Disagree Nor Agree	Agree	Strongly Agree
5.1. Our organization conducts regular audits /reviews of our programs/activities.	1	2	3	4	5
5.2. Our organization benchmarks its performance on key indicators against comparable organizations.	1	2	3	4	5
5.3. Managers at my level are held accountable for the results of their activities.	1	2	3	4	5
5.4. The individual to whom I report periodically reviews my results with me.	1	2	3	4	5

*Q.6. To what extent do you agree or disagree with each one of the following statements that best strategic plan evaluation at your organization?*

	Strongly Disagree	Disagree	Neither Disagree Nor Agree	Agree	Strongly Agree
6.1. After we develop and implement our strategic plan, we engage in a systematic and continuous effort to identify if the environmental conditions (e.g., forecasts of inflation or market growth rate, etc.) forming the basis of our plan have changed so that we can update our assumptions and strategic plan.	1	2	3	4	5
6.2. We focus on the accomplishment of the objectives of our strategic plan.	1	2	3	4	5
6.3. Once implementation of our strategic plan has begun, we engage in a systematic and continuous effort to identify and appraise unforeseen effects of the implemented decisions so	1	2	3	4	5

that we can assess whether we should change our course of actions.					
6.4. During the development and implementation of our strategic plan, we engage in a systematic and continuous effort to monitor the full range of emerging events inside and outside our organization which are likely to threaten the course of our strategic action, so that we can uncover important yet unanticipated information and safeguard our strategic plan on a continuous basis.	1	2	3	4	5

### SECTION D - ORGANIZATIONAL OUTCOMES

<i>Q.7. Relative to similar organizations at the present time, how do you rate your organization's performance in each of the following dimensions?</i>					
	<b>Much Worse</b>	<b>Worse</b>	<b>Similar</b>	<b>Better</b>	<b>Much Better</b>
7.1. Quality of products or services provided	1	2	3	4	5
7.2. Development of products/services	1	2	3	4	5
7.3. Employee satisfaction	1	2	3	4	5
7.4. Customer satisfaction	1	2	3	4	5
7.5. Sales/revenue growth	1	2	3	4	5
7.6. Market share	1	2	3	4	5
7.7. Return on investment	1	2	3	4	5
7.8. Social responsibilities	1	2	3	4	5
7.9. Operational efficiency	1	2	3	4	5

<i>Q.8. To what extent is your organization able to attain each of the followings?</i>					
	<b>Never</b>	<b>Seldom</b>	<b>Sometimes</b>	<b>Often</b>	<b>Always</b>
8.1. Adapting to the changes in competitors' market strategies.	1	2	3	4	5
8.2. Rapid adaptation of products or services to changes in clients' needs.	1	2	3	4	5
8.3. Rapid reaction to new threats in the market.	1	2	3	4	5
8.4. Rapid exploitation of new market opportunities.	1	2	3	4	5

### SECTION E - ENVIRONMENTAL DYNAMISM

<i>Q.9. To what extent do you agree or disagree with each of the following statements regarding industry.</i>					
	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither Disagree Nor Agree</b>	<b>Agree</b>	<b>Strongly Agree</b>
9.1. Products or services in our industry are updated quickly.	1	2	3	4	5
9.2. The acts of our competitors are difficult to predict.	1	2	3	4	5
9.3. The technology in our industry develops/ changes quickly.	1	2	3	4	5
9.4. It is difficult to predict the changes in customer needs.	1	2	3	4	5

## SECTION F - GENERAL INFORMATION

**Q.10. To what extent are the following individuals involved in the development of your organization's strategic plan?**

	Never	Seldom	Sometimes	Often	Always
10.1. CEO/managing director	1	2	3	4	5
10.2. Board of directors	1	2	3	4	5
10.3. Planning committee/specialists	1	2	3	4	5
10.4. Senior managers	1	2	3	4	5
10.5. Middle managers	1	2	3	4	5
10.6. Members of the supervisory management/lower managers	1	2	3	4	5

**Q.11. Please provide me with the following general information.**

11.1. When did your organization develop its first strategic plan (mention the year)?	Less Than 5 Years	5 Years	More than 5 Years		
11.2. What is the long-term planning horizon of your current strategic plan?	Less Than 5 Years	5 Years	More than 5 Years		
11.3. How long did your organization take to prepare its current strategic plan?	Less than 4 months	4-8 months	More than 8 months		
11.4. Number of full-time employees at your organization who are charged exclusively with strategic planning activities	Fewer than 100	100-249	250-499	500-999	More than 1000
11.5. Main activity of your organization					
11.6. Number of full time employees	<input type="checkbox"/> < 100 <input type="checkbox"/> < 100-249 <input type="checkbox"/> < 250-499 <input type="checkbox"/> < 500-999 <input type="checkbox"/> > 1000				
11.7. Number of expatriate employees	<input type="checkbox"/> < 100 <input type="checkbox"/> < 100-249 <input type="checkbox"/> < 250-499 <input type="checkbox"/> < 500-999 <input type="checkbox"/> > 1000				
11.8. Number of years you have spent at this organization	Less than 5 years	5-10 years	More than 10 years		

11.9. Your managerial level <input type="checkbox"/> Top management <input type="checkbox"/> Middle management <input type="checkbox"/> Lower management <input type="checkbox"/> Other, please specify			
11.10. Number of years at your current position	Less than 5 years	5-10 years	More than 10 years
11.11. The organizational level of the unit responsible for strategic planning <input type="checkbox"/> Division/sector <input type="checkbox"/> Department <input type="checkbox"/> Section/unit <input type="checkbox"/> Others (please mention) <input type="checkbox"/> There is no specific organizational unit responsible for strategic planning.			
11.12. What is the percentage of foreign ownership in your organization?	0% Foreign Ownership	1-25% Foreign Ownership	26-49% Foreign Ownership
11.13. Gender	<input type="checkbox"/> Male	<input type="checkbox"/> Female	

If there are any comments that you would like to add regarding this questionnaire, please do so below.

**THANK YOU! I REALLY APPRECIATE YOUR PARTICIPATION.**

Bakheet Al Katheeri (Researcher)

## Appendix C

Table (1-A) illustrates the summary of missing data in the study. This may be due to the length of the questionnaire although efforts were made to minimize the effect of this problem (see Section 3.9.4 in Chapter 3).

**Table (1-A)**

A summary of the missing data

<b>Variables</b>	<b>Valid</b>	<b>Missing</b>
1.1. Pro forma financial statements	182	0
(e.g., cash flow, income statement and budget)	182	0
1.2. Cost- benefit analysis	182	0
1.3. Benchmarking	182	0
1.4. Gap analysis	182	0
1.5. Balanced scorecard	182	0
1.6. Value chain analysis	182	0
1.7. Spreadsheet “what if” analysis	182	0
1.8. SWOT analysis	182	0
1.9. PEST (Political, Economic, Social and Technological) analysis	182	0
1.10. Portfolio analysis (e.g., Boston consulting matrix or General Electric matrix)	182	0



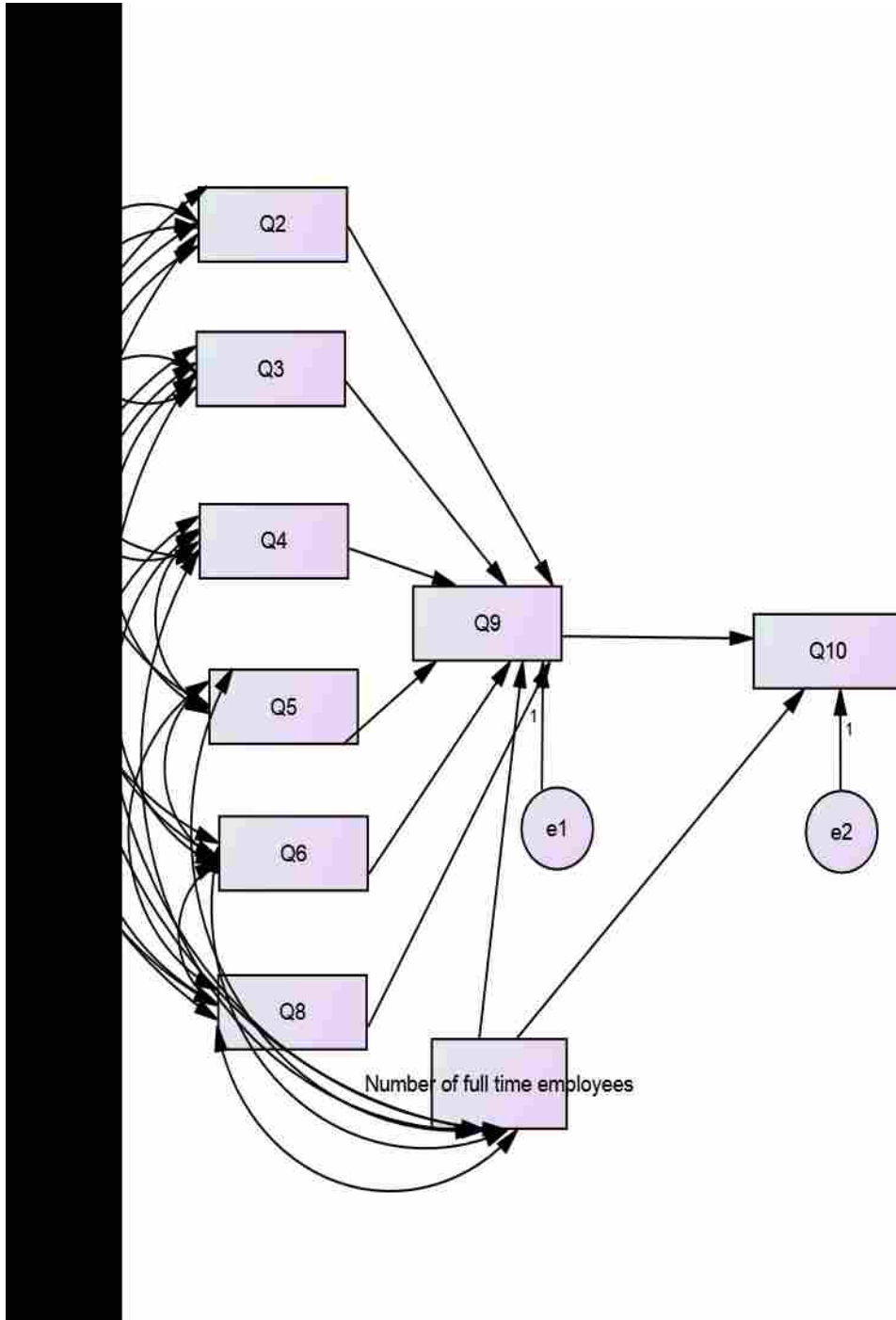
2.1. Everything that has to be planned is studied carefully during the process of strategic planning.	182	0
2.2. During the process of strategic planning, we analyse each decision very carefully.	182	0
2.3. During the process of strategic planning, many alternatives are evaluated carefully.	182	0
2.4. Those who are involved in strategic planning analyse and evaluate projects carefully.	182	0
2.5. Strategic planning is a very demanding process.	182	0
2.6. Those who are involved in strategic planning spare no effort.	182	0
3.1. We use a diverse set of ideas from internal and external sources (rather than from limited internal sources) in implementing our strategic plan.	182	0
3.2. We evaluate thoroughly each possible action before implementing our strategic plan.	182	0
3.3. We attempt to determine optimal courses of action for how to best implement our strategic plan.	182	0
3.4. We use the experiences of managers from different management levels while implementing our strategic plan.	182	0
3.5. We search extensively for possible implementation actions before we actually implement our strategic plan.	182	0
4.1. Our people have the necessary skills to implement our strategic plan effectively.	182	0
4.2. When our people don't have the necessary skills for implementing our strategic plan, we hire new staff with the necessary skills.	182	0
4.3. Our systems and processes (e.g., reward systems, manufacturing processes, information systems, etc.) are aligned to make our strategic plan work.	182	0
4.4. We have formal assignment of organizational specializations, authority and responsibility.	182	0
4.5. Our organizational culture (e.g., values that are shared by employees) is in alignment with our strategic plan.	182	0
4.6. The behaviors/ decisions of our managers are consistent with the requirements of our strategic plan.	182	0

4.7. We allocate the resources (e.g., money, technology, staff, etc.) that are necessary to support our strategic plan.	182	0
4.8. We plan and decide according to our established strategic plan.	182	0
5.1. Our organization conducts regular audits /reviews of our programs/activities.	182	0
5.2. Our organization benchmarks its performance on key indicators against comparable organizations.	182	0
5.3. Managers at my level are held accountable for the results of their activities.	182	0
5.4. The individual to whom I report periodically reviews my results with me.	182	0
6.1. After we develop and implement our strategic plan, we engage in a systematic and continuous effort to identify if the environmental conditions (e.g., forecasts of inflation or market growth rate, etc.) forming the basis of our plan have changed so that we can update our assumptions and strategic plan.	182	0
6.2. We focus on the accomplishment of the objectives of our strategic plan.	182	0
6.3. Once implementation of our strategic plan has begun, we engage in a systematic and continuous effort to identify and appraise unforeseen effects of the implemented decisions so that we can assess whether we should change our course of actions.	182	0
6.4. During the development and implementation of our strategic plan, we engage in a systematic and continuous effort to monitor the full range of emerging events inside and outside our organization which are likely to threaten the course of our strategic action, so that we can uncover important yet unanticipated information and safeguard our strategic plan on a continuous basis.	182	0
7.1. Quality of products or services provided	182	0
7.2. Development of products/services	182	0
7.3. Employee satisfaction	182	0
7.4. Customer satisfaction	182	0

7.5. Sales/revenue growth	182	0
7.6. Market share	182	0
7.7. Return on investment	182	0
7.8. Social responsibilities	182	0
7.9. Operational efficiency	182	0
8.1. Adapting to the changes in competitors' market strategies.	182	0
8.2. Rapid adaptation of products or services to changes in clients' needs.	182	0
8.3. Rapid reaction to new threats in the market.	182	0
8.4. Rapid exploitation of new market opportunities.	181	1
9.1. Products or services in our industry are updated quickly.	179	3
9.2. The acts of our competitors are difficult to predict.	179	3
9.3. The technology in our industry develops/ changes quickly.	180	2
9.4. It is difficult to predict the changes in customer needs.	179	3

# Appendix D

## Model



## Appendix E

### Notes for Model (Default model)

#### Computation of degrees of freedom (Default model)

Number of distinct sample moments:	45
Number of distinct parameters to be estimated:	39
Degrees of freedom (45 - 39):	6

#### Result (Default model)

Minimum was achieved  
 Chi-square = 27.266  
 Degrees of freedom = 6  
 Probability level = .000

#### Variable Summary (Group number 1)

Observed, endogenous variables  
 Q9  
 Q10  
 Observed, exogenous variables  
 Q2  
 Q3  
 Q4  
 Q5  
 Q6  
 Q8  
 Employees  
 Unobserved, exogenous variables  
 e2  
 e1

#### Variable counts (Group number 1)

Number of variables in your model:	11
Number of observed variables:	9
Number of unobserved variables:	2
Number of exogenous variables:	9
Number of endogenous variables:	2

#### Estimates (Group number 1 - Default model)

##### Scalar Estimates (Group number 1 - Default model)

##### Maximum Likelihood Estimates

**Regression Weights: (Group number 1 - Default model)**

	Estimate	S.E.	C.R.	P	Label
Q9 <--- Q2	.091	.068	1.340	.180	par_1
Q9 <--- Q3	-.311	.092	-3.370	***	par_2
Q9 <--- Q4	.107	.060	1.793	.043	par_3
Q9 <--- Q5	.296	.070	4.205	***	par_4
Q9 <--- Q6	.333	.078	4.280	***	par_5
Q9 <--- Q8	.288	.070	4.082	***	par_6
Q9 <--- Employees	.123	.031	4.042	***	par_23
Q10 <--- Q9	.707	.082	8.625	***	par_7
Q10 <--- Employees	.065	.040	1.623	.051	par_24

**Standardized Regression Weights: (Group number 1 - Default model)**

	Estimate
Q9 <--- Q2	.071
Q9 <--- Q3	.211
Q9 <--- Q4	.148
Q9 <--- Q5	.278
Q9 <--- Q6	.275
Q9 <--- Q8	.273
Q9 <--- Employees	.253
Q10 <--- Q9	.658
Q10 <--- Employees	.124

**Covariances: (Group number 1 - Default model)**

	Estimate	S.E.	C.R.	P	Label
Q2 <--> Q3	.064	.021	3.078	.002	par_8
Q2 <--> Q4	.128	.042	3.044	.002	par_9
Q2 <--> Q5	.124	.030	4.186	***	par_10
Q2 <--> Q6	.056	.025	2.258	.024	par_11
Q2 <--> Q8	-.009	.028	-.320	.749	par_12
Q3 <--> Q8	.043	.025	1.767	.077	par_13
Q4 <--> Q8	.370	.059	6.308	***	par_14
Q5 <--> Q8	.089	.034	2.596	.009	par_15
Q6 <--> Q8	.112	.031	3.619	***	par_16
Q3 <--> Q6	.132	.024	5.493	***	par_17
Q4 <--> Q6	.166	.045	3.666	***	par_18
Q5 <--> Q6	.155	.032	4.840	***	par_19
Q3 <--> Q5	.138	.027	5.150	***	par_20
Q4 <--> Q5	.290	.055	5.309	***	par_21
Q3 <--> Q4	.049	.035	1.369	.171	par_22
Q2 <--> Employees	.195	.063	3.109	.002	par_25

	Estimate	S.E.	C.R.	P	Label
Q3 <--> Employees	.063	.053	1.200	.230	par_26
Q4 <--> Employees	.712	.123	5.792	***	par_27
Q5 <--> Employees	.318	.077	4.111	***	par_28
Q6 <--> Employees	.342	.070	4.860	***	par_29
Q8 <--> Employees	.263	.077	3.426	***	par_30

**Correlations: (Group number 1 - Default model)**

	Estimate
Q2 <--> Q3	.276
Q2 <--> Q4	.273
Q2 <--> Q5	.388
Q2 <--> Q6	.199
Q2 <--> Q8	-.028
Q3 <--> Q8	.154
Q4 <--> Q8	.650
Q5 <--> Q8	.230
Q6 <--> Q8	.329
Q3 <--> Q6	.539
Q4 <--> Q6	.334
Q5 <--> Q6	.460
Q3 <--> Q5	.497
Q4 <--> Q5	.516
Q3 <--> Q4	.119
Q2 <--> Employees	.279
Q3 <--> Employees	.104
Q4 <--> Employees	.578
Q5 <--> Employees	.380
Q6 <--> Employees	.463
Q8 <--> Employees	.310

**Variances: (Group number 1 - Default model)**

	Estimate	S.E.	C.R.	P	Label
Q2	.265	.032	8.185	***	par_31
Q3	.201	.025	8.185	***	par_32
Q4	.827	.101	8.185	***	par_33
Q5	.382	.047	8.185	***	par_34
Q6	.298	.036	8.185	***	par_35
Q8	.392	.048	8.185	***	par_36
Employees	1.836	.224	8.185	***	par_37
e1	.124	.015	8.185	***	par_38
e2	.224	.027	8.185	***	par_39

**Squared Multiple Correlations: (Group number 1 - Default model)**

	Estimate
Q9	.716
Q10	.554

**Matrices (Group number 1 - Default model)****Implied Covariances (Group number 1 - Default model)**

	Employee s	Q8	Q6	Q5	Q4	Q3	Q2	Q9	Q1 0
Employee s	1.836								
Q8	.263	.392							
Q6	.342	.112	.29 8						
Q5	.318	.089	.15 5	.38 2					
Q4	.712	.370	.16 6	.29 0	.82 7				
Q3	.063	.043	.13 2	.13 8	.04 9	.20 1			
Q2	.195	- .009	.05 6	.12 4	.12 8	.06 4	.26 5		
Q9	.585	.234	.20 1	.22 9	.42 1	.05 3	.09 5	.43 6	
Q10	.532	.183	.16 5	.18 3	.34 3	.04 2	.08 0	.34 6	.50 3

**Implied Correlations (Group number 1 - Default model)**

	Employee es	Q8	Q6	Q5	Q4	Q3	Q2	Q9	Q10
Employee es	1.000								
Q8	.310	1.00 0							
Q6	.463	.329	1.00 0						
Q5	.380	.230	.460	1.00 0					
Q4	.578	.650	.334	.516	1.00 0				
Q3	.104	.154	.539	.497	.119	1.00 0			



	Employees	Q8	Q6	Q5	Q4	Q3	Q2	Q9	Q10
Q2	.279	.028	.199	.388	.273	.276	1.000		
Q9	.654	.567	.560	.562	.701	.181	.279	1.000	
Q10	.554	.411	.425	.417	.532	.132	.218	.738	1.000

**Residual Covariances (Group number 1 - Default model)**

	Employees	Q8	Q6	Q5	Q4	Q3	Q2	Q9	Q10
Employees	.000								
Q8	.000	.000							
Q6	.000	.000	.000						
Q5	.000	.000	.000	.000					
Q4	.000	.000	.000	.000	.000				
Q3	.000	.000	.000	.000	.000	.000			
Q2	.000	.000	.000	.000	.000	.000	.000		
Q9	.000	.000	.000	.000	.000	.000	.000	.000	
Q10	.000	.032	.042	.079	-.003	.049	.000	.000	.000

**Standardized Residual Covariances (Group number 1 - Default model)**

	Employees	Q8	Q6	Q5	Q4	Q3	Q2	Q9	Q10
Employees	.000								
Q8	.000	.000							
Q6	.000	.000	.000						
Q5	.000	.000	.000	.000					
Q4	.000	.000	.000	.000	.000				
Q3	.000	.000	.000	.000	.000	.000			
Q2	.000	.000	.000	.000	.000	.000	.000		
Q9	.000	.000	.000	.000	.000	.000	.000	.000	
Q10	.000	.782	1.158	1.929	-.045	1.756	-.013	.000	.000

**Factor Score Weights (Group number 1 - Default model)**

**Model Fit Summary****CMIN**

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	39	27.266	6	.000	4.544
Saturated model	45	.000	0		
Independence model	9	656.273	36	.000	18.230

**RMR, GFI**

Model	RMR	GFI	AGFI	PGFI
Default model	.016	.961	.705	.128
Saturated model	.000	1.000		
Independence model	.239	.389	.236	.311

**Baseline Comparisons**

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.958	.751	.967	.794	.966
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

**Parsimony-Adjusted Measures**

Model	PRATIO	PNFI	PCFI
Default model	.167	.160	.161
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

**NCP**

Model	NCP	LO 90	HI 90
Default model	21.266	8.667	41.391
Saturated model	.000	.000	.000
Independence model	620.273	540.834	707.136

**FMIN**

Model	FMIN	F0	LO 90	HI 90
Default model	.203	.159	.065	.309
Saturated model	.000	.000	.000	.000
Independence model	4.898	4.629	4.036	5.277

**RMSEA**

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.092	.104	.227	.002
Independence model	.259	.335	.383	.000

**AIC**

Model	AIC	BCC	BIC	CAIC
Default model	105.266	111.556	218.571	257.571
Saturated model	90.000	97.258	220.737	265.737
Independence model	674.273	675.725	700.421	709.421

**ECVI**

Model	ECVI	LO 90	HI 90	MECVI
Default model	.786	.692	.936	.833
Saturated model	.672	.672	.672	.726
Independence model	5.032	4.439	5.680	5.043

**HOELTER**

Model	HOELTER	HOELTER
	.05	.01
Default model	62	83
Independence model	11	12

**Observations farthest from the centroid (Mahalanobis distance) (Group number 1)**

Observation number	Mahalanobis d-squared	p
34	35.630	.000
10	27.631	.001
35	25.762	.002
28	25.148	.003
122	24.889	.003
18	22.819	.007
33	22.407	.008
19	20.255	.016
134	20.151	.017
16	18.999	.025
21	17.989	.035
2	17.028	.048
45	15.918	.069
60	15.918	.069
71	15.918	.069
44	14.943	.093

Observation number	Mahalanobis d-squared	p
59	14.943	.093
70	14.943	.093
29	14.612	.102
3	14.188	.116
15	13.987	.123
14	13.867	.127
97	13.820	.129
9	13.722	.133
23	13.561	.139
98	13.238	.152
123	13.057	.160
43	12.844	.170
30	12.744	.175
101	12.676	.178
37	12.651	.179
57	12.651	.179
68	12.651	.179
27	12.627	.180
100	12.584	.182
99	12.538	.185
109	12.457	.189
139	12.432	.190
96	12.283	.198
159	12.236	.200
49	12.204	.202
64	12.204	.202
74	12.204	.202
86	12.204	.202
40	11.886	.220
41	11.696	.231
5	11.504	.243
20	11.443	.247
26	11.363	.252
17	11.006	.275
24	11.006	.275
82	10.845	.286
93	10.684	.298
95	10.582	.305
81	10.439	.316
6	10.408	.318
149	10.376	.321
22	10.326	.325
32	10.159	.338

Observation number	Mahalanobis d-squared	p
112	10.032	.348
110	9.895	.359
144	9.860	.362
115	9.846	.363
118	9.739	.372
137	9.677	.377
108	9.567	.387
12	9.433	.398
4	9.249	.415
133	9.197	.419
36	9.085	.430
56	9.085	.430
67	9.085	.430
106	9.036	.434
113	8.981	.439
38	8.754	.460
58	8.754	.460
69	8.754	.460
161	8.754	.460
128	8.630	.472
141	8.630	.472
146	8.604	.475
111	8.595	.476
125	8.411	.493
117	8.382	.496
54	8.302	.504
78	8.302	.504
91	8.302	.504
160	8.270	.507
140	8.208	.513
177	8.002	.534
143	7.925	.542
94	7.925	.542
119	7.804	.554
126	7.664	.568
11	7.623	.573
80	7.594	.576
52	7.525	.583
66	7.525	.583
89	7.525	.583
104	7.525	.583