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THE IMPACT OF STRATEGIC FORESIGHT
AND MANAGEMENT PRACTICES ON ORGANISATIONAL PERFORMANCE:
EVIDENCE FROM THE PAKISTAN TEXTILE INDUSTRY

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ABSTRACT

This thesis examines the link between strategic foresight, various management practices and organizational performance by drawing on data from a sample of 250 Pakistani textile organizations obtained from a questionnaire survey. Structural equation modelling (SEM) is employed to test the study's hypothesis

The main findings of the study are as follows:

- The study confirmed the hypotheses that there is a direct positive link between strategic foresight and company performance in textile firms in Pakistan, and that promotion of strategic foresight management practices enhances company performance.
- The results showed that with companies having a family member as CEO, there is a higher number of management practices significantly influencing the company performance.
- The results revealed that some of the dimensions of general strategy, for example, carry a significant impact on some of the financial measures in the study.

In the process of establishing the strategic foresight, management practices and organizational performance relationship, the study highlights implications for practitioners, policy makers and academicians.

Prior studies have generally focused on firms from advanced industrialized countries, however, this study was explicitly modelled in a developing country context and specifically in the case of Pakistan textile organizations. This study implements a fresh approach using four types of literatures (strategic foresight literature, management practices literature, organizational performance literature and Pakistani organizations literature), synergising their insights as contextual intelligence and then empirically testing them.

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DECLARATION

I declare that this thesis, which I submit to Warwick Business School (University of Warwick) for examination, in consideration of my application for the award of Doctor of Philosophy, is my own personal effort and composed solely by myself.

This work has not been submitted in any previous application for a degree at University of Warwick or any other university. Furthermore, I took reasonable care to ensure that the work is original, and, to the best of my knowledge, does not breach copyright law, and has not been taken from other sources except where such work has been cited and acknowledged within the text.

Signed:

Student Number: 1364142

Date: 16th day of December 2020

CHAPTER 1

Introduction

1.1 Background of the Study

Pakistan is a country beset by incessant on-going turbulence and uncertainty in the wake of pernicious corporate corruptions, governmental corruptions, weak institutions and dominance of politics by small elites which means that change is not a consideration. The Textile Industry in Pakistan has long been the backbone of the country's economy. It contributes some 60 per cent (US \$ 9.6 billion) to Pakistan's total exports (Khan & Khan, 2010). However, in recent years the country's textile industry has been suffering a major decline in competitive growth. The global textile industry is under immense pressure due to cutthroat competition from ultra low-cost producers in China and elsewhere. Specifically, the Pakistan textile industry is facing critical challenges due to the global business pressures as well as internal uncertainty. The decline in competitiveness stems not only from the challenges that may arise in the future, but also from those prevalent currently due to the socio-political and socio-economic environment in Pakistan.

This study is appropriate to address the aforementioned challenges the Pakistan textile industry faces in an interdependent globalised world. Arguably, there is a need for a paradigm shift in corporate strategy to achieve efficiency and

competitiveness. This is particularly true in the case of Pakistan. There is an inherent requirement for a deeper understanding about the possibility and challenges of strategic foresight to achieve sustainable competitive advantage. Prior literature reveals that competitiveness can be addressed by relying upon and effectively utilizing certain collateral means (Balkenhol & Schütte, 2001; Besanko & Thakor, 1987; Chan & Thakor, 1987). The most significant means that have gained currency in the literature include infrastructure (Lufumpa, Mubila, & Yepes, 2017), macro-economic environment (Erel, Julio, Kim, & Weisbach, 2011), technological promptness (Singh, 2014), and innovation (Shen, Yan, & Zhang, 2014).

1.2 Rationale of the Study

This thesis is a study of strategic foresight and management practices as determinants of performance and sustained competitiveness. The site of the empirical study is Pakistan, which is an under researched area.

Strategic foresight is “a set of strategic tools that support decisions with adequate lead time for preparation and strategic response” (Calof & Smith, 2010). Strategic foresight comprises the activities and processes that assist decision makers in the task of defining the company's future course of action (Vecchiato, 2012).

Management practices refer organization-wide priorities and resource allocation decisions, providing overall direction and ensuring integration of the diverse functional areas, thus affecting ultimate performance of the organization (Krishna Shrestha & Ram Gnyawali, 2013). Organizational performance refers to how well an organization achieves its market-oriented goals as well as its financial

goals (Li et al., 2006). The site of the empirical study is Pakistan, which is an under researched area.

The concepts of strategic foresight, management practices, and performance are under-researched. To the best of author's knowledge, there is no research to date that has assessed the impact of strategic foresight on performance. Although, there has been some studies that have assessed the impact of determinants of general strategy namely forecasting, participation, and observation (Doering & Suresh, 2016; Wang et al., 2018; Köseoglu et al., 2019) on performance. There is little or no research that brought the key dimensions together and ascertain their impact on organizational performance. Additionally, management practices have been identified as a key contributor in enhancing organizational performance. With focus of existing research on individual management practices, for instance human resource management practices (Wuen et al., 2020), innovative management practices (Leković et al., 2019), quality management practices (Phan et al., 2019), inventory management practices (Atnafu & Balda, 2018), supply chain management practice (Chin & Tat., 2015), facilities management practice (Koleoso et al., 2013), or safety management practice (Mearns et al., 2003).

Although limited but existing research has also taken into account different management practices together in a single study. However, the limitations of the studies shall also be highlighted. Major contribution in existing research on management practices is by Bloom and other (2007; 2010; 2011; 2012; 2015; 2016; 2017; 2019). However, there are limitations in the research that shall be highlighted. Bloom et al., (2010) ascertained the impact of *Management Practices*

and Energy Intensity in only UK firms. Bloom et al., (2011) Assessed Limited Management practices that include factory operations, quality control, inventory control, loom planning, human resources, and sales and order in Textile industry with sample size of 17 firms only. Bloom et al., (2012) Only Compared Management Practices. Bloom et al., (2015) made Comparison of Private Equity Ownership and Management Practices in multiple countries. Recently, Bloom et al., (2019) studied management practices based on Two wave data in Manufacturing Plants in the US). In terms of impact on performance, Bloom and Van Reenen (2007) research the impact of management practices in US, France, Germany and the UK with secondary data on Performance). Bloom et al., (2017) assessed the impact of management practices on firm performance in different countries). With such limited studies on the impact of management practices on performance, the findings cannot be referred to as conclusive and require further research in the area.

With much of the existing research on strategy and management practices conducted in the developed countries, there is a significant need for research in developing economies to generalize the findings. Lack of research in developing economies was established through a search in the Web of Science database. The search yielded zero results for two searches. One with keywords “Strategic Foresight” and “Pakistan” and other with “Management Practice” and “Pakistan”. This indicates that there is no or little research on these significantly important management concepts in Pakistan. Furthermore, Pakistan is a country which arguably has been under-examined in prior studies. This provides an opportunity to make a significant new contribution not only to the existing literature but also to practice, as the study should go a long way to help

practitioners identify the role of strategic foresight and different management practices in improving organizational performance. This researcher has valuable practical experience of the country, having held senior positions in leading organisations in Pakistan, and was motivated through sheer fascination of how the country continues to have a vibrant textile industry comparable with other countries in South East Asia - in spite of all the negativity and resource issues that will be considered later in the study. One example is the crippling power cuts that affect the length and breadth of the country for up to 16 hours a day. Nevertheless, Pakistan's major industries, such as banking and textiles, continue to be among the best performing globally (Lall & Weiss, 2004). Furthermore, Pakistan has been listed among Next Eleven (N-11), the eleven countries that along with the BRICS have a high potential of becoming the world's largest economies in the 21st century (Martin, 2012). The world's largest deep sea port, Gwadar, is in Pakistan, and is the centrepiece for CPEC (China Pakistan Economic Corridor) a direct sea route to China and beyond which is under construction and will potentially catapult Pakistan to be an economic powerhouse globally. The reasons for the aforementioned economic success are arguably in no small part due to management efficiency and strategy. Therefore, the study potentially points to voids in management research that call for further studies in the country in the future.

Using the Pakistan textile industry as a case study the research presents arguments for management practices and strategic foresight as higher level competencies from a resource-based view (Barney, 1991; Barney & Arikan, 2001).

Furthermore, the study reviews extant literature in order to determine how these phenomena can contribute to understanding of competitiveness.

1.3 Thesis Statement

Studying management practices and strategic foresight as determinants of organizational performance enriches understanding of organizations from an emerging economy.

1.4 Objectives of the Study

1.4.1 General Objectives of the Study

The main objective of the study is to examine the effects of strategic foresight and different management practices on organizational performance in the context of the Pakistan Textile Industry. Specifically, this research seeks to examine the relationship between the three constructs of strategic foresight, management practices and organizational performance by considering strategic foresight and management practices as independent variables and organizational performance as the dependent variable.

1.4.2 Specific Objectives of the Study

For the sake of further clarity, the specific objectives of this study are to:

- i. Assess the impact of strategic foresight on organizational performance;
- ii. Examine the moderating role of international competitors and international sales between strategic foresight and organizational performance;
- iii. Examine the impact of management practices on organizational performance.

- a. Compare the significance of the relationship between management practices and firm performance in companies where the CEO is a family member and where the CEO is not a family member.
- iv. To examine the impact of general strategy on firm performance

1.5 Research Questions

Based on the research objectives of this study, the following principal research question is posed: Do strategic foresight and management practices have positive or negative effects on organizational performance? In addition, the following secondary research questions are:

- i. Does strategic foresight significantly impact organizational performance?
- ii. Does international competitors and international sales moderate the relationship between strategic foresight and organizational performance?
- iii. Is there an impact of management practices on organizational performance?
- iv. Does general strategy significantly impact firm performance?

1.6 Significance and Relevance of the study

As identified in the rationale for the study, there is a paucity of research linking general strategy, strategic foresight, and management practices with organizational performance specifically in the domain of Pakistan textile industry. This thesis attempts to address the knowledge gap by contributing in four domains, namely strategic foresight literature, management practices literature,

organizational performance literature, as well as practice in the Pakistan textile industry.

The existing literature suggests that a study of this nature has not been attempted before although it has been demonstrated that some work has been done in terms of theoretical research articles which can be built upon (Bloom, Eifert, Mahajan, McKenzie, & Roberts, 2011; Bloom, Genakos, Martin, & Sadun, 2010; Bloom, Genakos, Sadun, & Van Reenen, 2012; Bloom, Lemos, Sadun, Scur, & Van Reenen, 2016; Bloom, Sadun, & Van Reenen, 2015, 2016; Bloom & Van Reenen, 2007; Eskandari et al., 2020; Hasnu, 2016; Parnell and Brady, 2019; Eker and Eker, 2016; Li and Chen, 2019).

The extant literature highlighted several factors which influence the performance of the firm (Wang et al., 2018; Wuen et al., 2020; Leković et al., 2019; Phan et al., 2019; Atnafu & Balda, 2018). However, the role of strategic foresight and management practices has been less explored (Bloom et al., 2019; Köseoglu et al., 2019). The current research work would fill the research gap by furnishing empirical evidence of the effect strategic foresight practices, management practices on the textile industry working in the context of Pakistan.

The results obtained under this study would be instrumental for firm's managers to established such an environment which focused on strategic foresight practices and management practices that leads towards improved organizational performance. This study will further fuel a healthy academic discourse and will create a paradigm shift for future researchers to analyze the practices of strategic foresight and management practices in the context of textile industry as well as other industries that have a significant impact on sustainable development and national income.

The research plans to benefit global industry and significantly contribute to existing management theories and philosophies. The research aims to make important contributions. First, this study contributes to the field of strategy and its impact on organizational performance by establishing how the two concepts are related. Second, assess the role of management practices in fostering organizational performance and identify which practices can lead to improved organizational performance. Third, no previous study proposes a research in context of textile industry in Pakistan. Hence, the present study is the first to assess the role of strategic foresight and management practices in improving organizational performance in textile industry of Pakistan. Finally, the study would add to institutional theory by ascertaining the role of strategy (general and foresight) and management practices in leading to improved organizational performance.

Outcomes of this study can provide guideposts to policymakers as well as the future generations, especially the business students of Pakistan. It can also be helpful for entrepreneurship programs and strategy analysts alongside its insights for practitioners and academicians. The study provides an original and conceptually new approach to promoting robust structures for strategic foresight and management practices to become higher level competencies critical to organisations as a tool for improving organizational performance.

The beneficiaries of this study would include global business and management theorists and philosophers. The focus on strategic foresight would provide business executives and government policy makers with interesting methods to envision the future. It may also help them to understand the implications of foresight on performance (Rohrbeck and Schwarz, 2013). The study would be

beneficial to academic researchers and corporate executives in imparting valuable learning in different concepts related to the utilization of effective strategic foresight-based decision making. The appreciation of such strategies by respective professionals should assure them of a better understanding of competitive advantage in this field. Moreover, the study provides recommendations on the evaluation of organizations in accordance to strategic foresight-based competitiveness. The importance of this research is further reinforced by the need to understand the complexities that these uncertain and turbulent political, economic and society related conditions bring about in terms of the difficulties for the said organizations themselves to see beyond these environments.

1.7 Delimitations of the Study

This study focuses upon the organizational level specifically in the Pakistan textile industry while it also considers other levels of Pakistan textile industry such as intra-organizational as well as the inter-organizational level of textile industry.

1.8 Organisation of the Thesis

The remainder of the thesis is set out as follows: In order to provide background information on the site of the study Chapter 2 provides a review of the literature, develops the hypotheses of the study and sets out the research model of the study. Chapter 3 provides a brief overview of the Pakistan textile industry along with its potential. Chapter 4 sets out the research methods of the study including the study design, instrumentation design and data collection process. Chapter 5 provides characteristics of the sample and descriptive statistics of the constructs. Chapter 6 provides exploratory and confirmatory factor

analysis. Chapter 7 analyses the hypotheses testing and reports the results of the study. Finally, Chapter 8 discusses the findings, implications and limitations of the study, as well as recommendations and suggestions for future research.

CHAPTER 2

Literature Review and Hypotheses Development

2.1 Introduction

This study begins with an extensive literature review. The first part is a general overview of the literature on the concepts of strategic foresight, competency and competitiveness as well as the effect of strategic foresight and possible strategies to deal with it. This provides a grounding for later research and forms part of the basic bedrock on and around which the thesis is constructed. The second part of the review includes a more specific review of the literature. This time emphasizing the textile industry in South Asian countries with regards to competitiveness issues that businesses may face there from a regional and global markets perspective, with particular emphasis on the effect of this competitiveness upon the textile industry in Pakistan. This includes a comparative analysis between the environment in Pakistan and regional South Asian countries. The rationale for this analysis is twofold: (i) to form a preliminary conclusion as to the environment in Pakistan, how this environment affects the textile industry in that country and the steps needed to mitigate or counter the issues as identified by research; (ii) to provide a preliminary answer to the relevance of Pakistani institutions and the contemporary political economy in addressing competitiveness relating to the textile industry in the country.

The role of strategic foresight is very important for the success of organizations particularly when there are sudden environmental changes. This role becomes more crucial in the context of uncertainty and complexity. For strategic foresight and management practices the concept of mimetic and normative powers of isomorphism of institutional theory become relevant especially in the matters of organizational performance (Daft, 2001; DiMaggio & Powell, 1983) and how organizations obtain legitimate acceptance in the eyes of other organizations by adapting isomorphism and by fitting with others and similar organizations. This thesis tries to evaluate such phenomenon in the context of Pakistani textile organizations. Here it is worth mentioning the concept of contextual intelligence (Khanna, 2014). According to Khanna (2014), knowledge which seems sound universally may not be applicable locally. One thing may be good for one country and may not be so good in other country. As a result, universal best practices cannot travel locally. From here onward the study tends to focus on the local practices of the textile industry in Pakistan by capitalizing upon the insights of Khanna (2014).

Different studies highlight the importance of strategic foresight and suggest that interventions are impossible to prescribe in advance (Manu, 2006; Constanzo, 2004; Pina e Cunha and Ruff, 2009). These studies paved the way to the research work that analysed different types of contexts (social, political, economic, historical and technological) where emergence or failure of foresight takes place. There are two drivers of strategic foresight. Firstly, organizations try to evaluate the impact of emerging technology and how they can realize their limits and prepare themselves to tackle the uncertainty of an unknown future

(Constanzo & Mackay (2008) Tsoukas & Shepherd (2004a). Moreover the studies of Antonacopoulou (2010), Bodwell & Chermack (2010), Drew (2006) and Van der Duin & den Hartigh (2009) became very popular in conveying their message that strategic foresight is a facilitator of desirable and flexible outcomes of organizations, such as, innovation, ambidexterity and adaptive learning. From these studies, one can easily infer that top management is the ultimate source of foresightedness which paved the way for the development of a rich literature exploring the psychological and cognitive dimensions that enable or hamper the development of managerial foresight. The hallmark studies of Booth, Rowlinson, Clark, Delahaye, & Proctar (2009), Day, Schoemaker & Gunther (2004) and Mackay & McKiernan (2004a) are relevant in this regard. Undoubtedly foresight processes require the mapping of organizational tasks along with different connections and mapping organizational architectures and owing to the methodological complexity involved such questions are often overlooked. Credit goes to Waehrens and Riis (2001) who took their inspiration from activity theory and successfully showed the mechanism of rigid activity systems and weak ties in organizational subsystems which are not only responsible for the enactment of foresight in organizations but also severely constrain the interactions of emerging social practices. In this scenario, very few researchers have attempted to examine at what time organizational members take foresightful actions, what are the conditions of foresightful actions, how limited knowledge about the future play its role and how future events can be anticipated and how they can be dealt with in the face of future uncertainty and complexity. Finally, how organizing practices play their role in facilitating or constraining organizational foresight.

Understanding the phenomenon of balancing the needs of the present and preparing for successfully competing for an unknown future with full understanding of organizing practices should arguably be a priority.

This thesis is a response to this organizational challenge and explores those organizing practices which foster organizational performance. Particularly, in the context of developing countries like Pakistan, its relevance becomes utmost and highlights the genuine epistemological relevance to the theory and practice of organizational foresight. The contribution of this thesis can be seen as a significant addition to the strategic foresight literature. Although, previous studies have highlighted the contributory factors of enactment or failure of organizational foresight, no in-depth link of strategic foresight and organizational practices have been explored in the context of developing countries like Pakistan. By employing a quantitative approach and different management organizations of Pakistan, this thesis opens up a new window of possibility for understanding and evaluating why some countries and their organizations are more foresightful than others. This thesis develops the potential insights in different organizational context of Pakistani organizations of both private and public sectors by using primary and secondary data specifically of textile organizations in Pakistan.

2.2 Strategy

The field of literature dealing with strategy is vast. However, its beginnings lie in the history of military arts (Iden, Methlie, & Christensen, 2017; Sollosy, 2013; Wilkinson, 2013). The need for strategy lies in the inevitability of competition (Henderson, 1989; Iden et al., 2017; Sollosy, 2013; Wilkinson, 2013). Entities which are similar, require the same resources to exist and prosper, and as the number of

such entities increase and resources become scarce, increased competition makes it increasingly important to come up with ways to achieve an advantage (Henderson, 1989; Inlove & Gudiksen, 2017; Sollosy, 2013; Wilkinson, 2013). Thus, each entity needs to develop that “something” if it wants to survive. In the case of humans that manifested in the need to protect and preserve, ultimately leading to conflict with others humans and the need for that “something” for military purposes (Henderson, 1989; Iden et al., 2017; Sollosy, 2013; Wilkinson, 2013). Initially, these conflicts were conducted in a random and disorganized manner, but as human experience increased, and powers of perception and cognitive abilities began to improve the need to find “better ways” to do things began to emerge. This desire to develop that “something” to find “better ways” was the foundation of the concept of strategy (Henderson, 1989; Iden et al., 2017; Sollosy, 2013; Wilkinson, 2013). Similar considerations to survive in the face of competition are in play in the case of business organisations.

Thus, strategy can be very crudely described as the “unique combination of acquired wisdom, craft, and later science” to overcome or survive competition (Kaivo-oja, 2017; Sollosy, 2013; Wilkinson, 2013). Prior literature has provided various insights into the concept of strategy. So strategy has been described as the ability to analyse the present situation and finding out what one’s resources are and what they should be to changing the present situation if the need arises (Bracker, 1980; Kaivo-oja, 2017; Sollosy, 2013; Wilkinson, 2013). It concerns the ability to accept uncertainty and realizing that the decision maker would not have all the relevant information and observe the full spectrum of events (Sollosy, 2013). Uncertainty will exist not only in relation to the information present but will

also exist due to the actions of a 'dynamic and thinking opponent' and strategy requires decision making in the face of such uncertainty (Sollosy, 2013).

Strategy has also been understood as the long-term coordination required to provide a company structure, direction, and focus, identifying long-term organisational goals and adopting a course of action and allocating resources necessary for achieving said goals (Ansoff, 1965). It requires a systematic anticipation of future environmental challenges and developing plans and making decisions guided by product/market scope, growth direction, competitive advantage, and synergy to respond to these challenges (Ansoff, 1965; Miller, 2017; Sollosy, 2013).

Further development in the concept of strategy in the literature focused on identifying the contribution the organisation makes to the industry value chain. This requires management to look at the company from the viewpoint of the customer, determining the value it adds in the eyes of the customer (Miller, 2017; Porter, 1979; Sollosy, 2013).

Another advancement in the concept takes strategy not as a simple step-by-step analysis, but rather as a creative and intuitive thought process. A process which attempts to positively differentiate the organisation from its competitors, using its relative strengths to satisfy the customer, maximizing strengths in the face of environmental challenges. Strategy has been considered under such a resource-based view as "assembling the optimum mix of resources, including technological, human, and supplier relations, and then configuring them in unique and sustainable ways" (Barney, 1991, p 10;).

The strategic process has also been understood as a craft. Strategies have been described as not necessarily deliberate acts, but also as insights that emerge

through circumstances. Thus, it requires making sense of the past and understanding the patterns of past behaviour to understand an organisation's capabilities and potential to better manage the future. Such an understanding of strategy requires that the time be spent understanding the concepts of “strategic intent”, “strategic architecture”, “industry foresight”, and “core competencies” (core competencies are those one or two key things a company does better than any of its competitors) (Hamel & Prahalad, 1994; Sollosy, 2013; Wilkinson, 2017).

The rise of the Information Age has also brought new insights into the concept of strategy. Thus strategy also requires that an organisation learn to adopt a structure through which people can “continuously expand their capacity to learn and be productive—new patterns of thinking are nurtured, collective aspirations are encouraged, and people are encouraged to see the “whole picture” together” (Csaszar & Laureiro-Martínez, 2018; Senge, 1997; Sollosy, 2013; T. J. Wilkinson, 2013).

Individual theories of business strategy can be categorised into four theoretical paradigms: product-market-based perspectives, industry-based theories, resource-based theories, and competition-based theories (Keig, Dawn, & Brouthers, 2013; Sarpong & Hartman, 2018; Wilkinson, 2013).

2.2.1 Product-Market–Based Views of Business Strategy

The main thought leader for this paradigm is Ansoff (1957). Earlier theories on business strategy focused on the intelligent selection of a particular product-market combination to fuel economic growth and achieve competitive success. These theories primarily see strategy through the lens of either the product-market matrix or a dimensional conceptualisation of the product-market. The aim

being to use various combinations of the product-market to leverage opportunity and growth (Keig et al., 2013; Wilkinson, 2013).

2.2.2 Industry-Based Foundations of Business Strategy

The main thought leader for this paradigm is Porter (1979). The focus of strategy here is on industry-level factors. These theories posit that there is no one “best” way to obtain and maintain competitive advantage in a given industry. These theories see each industry with its own particular barriers to entry and intensity of competition. Thus the aim of the organisation is to seek that best way through its conduct (e.g., pricing and production decisions, collusion activity) to overcome those barriers and competition and achieve that level of performance which will allow it to maintain and enhance its performance and advantage (Keig et al., 2013; Wilkinson, 2013).

2.2.3 Resource-Based Theories of Business Strategy

The main thought leaders for this paradigm are J. Barney (1991) and Wernerfelt (1984). As opposed to *industry*-based theories the resource-based business strategy is “inside-out” in its approach to strategy formulation. It looks at factors that cannot be traced to industry-level factors; instead it looks at the organisation’s own unique resources that can help it to achieve competitive advantage. Such theories have identified four characteristics of an organisation’s resources that can provide it sustainable competitive advantage: these characteristics need to be *valuable*, *rare*, *inimitable*, and *non-substitutable* (Keig et al., 2013; Wilkinson, 2013)

2.2.4 Competition-Based Theories of Business Strategy

The main thought leader for this paradigm is Shapiro (1989). The industry-based view of business strategy emphasises the importance of industry structure and resource-based theories emphasise the organisation's own resources, the competition-based theories play a role in filling the gap left by the aforementioned two sets of theories. The competition-based theories examine the dynamics of competition between rivals, emphasising that competition drives the need for organisations to think strategically. The aim is to improve the competitive outlook of the organisation by manipulating the market environment. The theories emphasise the need to look closely at the organisation's actions and its competitors' reactions in the formulation of strategy (Keig et al., 2013; Wilkinson, 2013).

It is clear from the preceding discussion that strategy covers the overall purpose of the organisation, and its definition would require an examination of all the multiple aspects that form it. In short strategy is a framework through which a company ensures its continuity while managing to adapt to the changing environment and achieving competitive advantage.

2.3 Strategic Thinking

Strategic thinking is often understood as a creative, divergent thought process (Heracleous, 1998). It is important to appreciate the difference between strategic thinking and planning. Though they can be understood as falling on a continuum, with strategic thinking begetting strategic planning which in turn begets strategic management, in reality they fall within a loop, a constant without an end each phase reinforcing the other (Sollosy, 2013; Gandolfi, 2013; Wilkinson & Timothy J,

2013; Mintzberg, 1987). Strategic thinking is concerned with synthesis, involving intuition and creativity to formulate a vision of where the organisation is heading. Thus, it is generally intuitive, experimental and disruptive, attempting to go beyond purely logical thinking since it deals with future information which is incomplete. Strategic planning on the other hand is strongly analytical, logical, deductive and pragmatic concerned with keeping things on track, involving “breaking down goal or set of intentions into steps, formalizing those steps so that they can be implemented and articulate the anticipated consequences or results of each step (Mintzberg, 1994; Rhisiart, Miller, & Brooks, 2015; Voros, 2003).

The purpose of strategic thinking is to find novel, imaginative strategies which can re-write the rules of the competitive game; and to envision potential futures significantly different from the present (Heracleous, 1998). Such an understanding of strategic thinking is one that meshes easily with the concept of foresight, producing strategic foresight which is intended to allow firms to innovate and renew themselves to and understand and examine environmental disturbances and uncertainties and prepare for future uncertainties (Ringland, 2010; Rene Rohrbeck, Arnold, & Heuer, 2007; René Rohrbeck, Battistella, & Huizingh, 2015; René Rohrbeck & Gemünden, 2008; Said & Hellara, 2013). Thus understood strategic foresight is intended to enhance a firm’s value by increasing its capacity to perceive change and to interpret, understand and respond to it, by influencing other actors, and increasing capacity for organizational learning (René Rohrbeck & Gemünden, 2008; Said & Hellara, 2013; Sarpong & Maclean, 2014).

Strategic thinking and foresight are about exploring options, about opening one to a wider range of perceptions and options to ensure better decisions

(Voros, 2003). Strategic thinking and foresight are intended to open up an extended range of ‘what if?’ propositions, resonating with the question: ‘what might we need to do?’ (Voros, 2003). On the other hand strategy development is about making decisions and setting directions, with assessing and examining choices, making decisions, setting a goal, objective or destination, on information gathered through strategic thinking, resonating with the question ‘what will we do?’; while strategic planning is about implementing actions, resonating with the question ‘how will we do it?’ (Voros, 2003).

A review of the literature reveals that strategy making can be classified into two different categories -- adaptive logic or creative logic in face of economic change (Regner, 2005). Adaptive logic “entails changing within the confines of existing tradition and practice, while a creative response involves seeking solutions outside of existing practice” (Regner, 2005). Adaptive logic focuses primarily on efficiency and improvements in existing products/services, customers/clients, organization, etc. While under the creative logic the emphasis is on innovation, flexibility, change and development of products, customers, etc. (Regner, 2005). These two logics comprise two sets of processes and routines or capabilities in the firm; the adaptive logic is linked to ordinary capabilities which is intended to allow a firm to succeed in the short-term, while the creative logic is related to dynamic capabilities, that serve to extend, modify or create ordinary capabilities (Regner, 2005) , i.e. allowing the firm to survive in the long run.

The difference between the two logics provides an understanding of the two separate categories of a firm’s capabilities and is not intended to be used to prefer one logic over the other. The adaptive logic provides readymade and efficient standard operating procedures, intrinsically linked to existing values

beliefs and knowledge structure; it is dominated by cognitive simplicity, which promotes strategic simplicity, and thus carries the danger of locking the firm in the prevailing strategy in an uncertain environment (Regner, 2005). On the other hand the creative logic is more flexible, with emphasis on original solutions (Regner, 2005). Creative logic is concerned with forming new knowledge structure or strategic views, and thus carries the risk of being too costly, further there is a danger of “wishful thinking, and it must be acknowledged that there is no guarantee that new ideas cannot be bad ideas (Regner, 2005). Therefore there is danger with using one logic exclusively --- adaptive logic carries the risk of lock-in effects in terms of industry or market short-sightedness and resource or core-competence; while the creative logic exploration might lead to failure that tends to induce further exploration, and so on, possibly creating an exploration trap (Regner, 2005). For success a balanced mix of both the logics is required, keeping in mind the pitfalls of each. Strategic foresight as high-level competency relies on the idea of creative logic of strategy and is an amalgamation of foresight and strategic management methods, developing the ability to try to take into account all the variables to achieve a certain semblance of control and thus certainty in a rapidly changing environment.

Kachaner & Deimler (2008) provide a framework for bringing robustness to strategic thinking or as they term it “stretching” the strategy process along three mutually reinforcing dimensions:

1. Stretching time horizons: the idea is to give the short, medium, and long term each its' due.
 - Long-term visioning: This time horizon has two objectives. First, to envision and get ready for the changes for time frames from anywhere

between 5 to 20 years and to make a plan to affect the future competitive environment to the firm's advantage. The other is to define both the company's long-term objectives and business models that will support them.

- Medium-term business strategy-setting: The focus is on establishing the path to enhanced competitive advantage. The question to be answered is what are the critical business initiatives that will drive relative advantage, and which one will allow the firm to realize its medium-term strategies to outperform competitors and to meet or exceed the market's expectations for growth, profitability, and asset utilization?

□ Annual business reviews: This horizon has a dual purpose. The first is to analyse the core assumptions of the long-term vision and medium-term business strategy in light of weak signals and market developments. The second is to define the specific activities that bring inherently abstract strategies to life in the rough and tumble of day-to-day business realities.

2. Stretching thinking: A number of techniques, listed below, are used to boost creativity and insight, to multiply the viewpoints through which business is evaluated. The list of techniques:

- Invest in the art of questioning
- Turn issues upside down
- Deconstruct your business
- Role play
- Think like an owner

- Bring in external perspectives
- Challenge strategies against megatrends
- Build scenarios

3. Stretching the engagement process: The idea is to foster dialogue, preparedness, and alignment across the organization. This can be done through engagement practices that inspire people at different levels of the organization to think and act strategically and try to eliminate the outmoded distinction between corporate “thinkers” and business-unit “doers.” Engaging employees, at certain points, from all levels, to the strategy debates can add refreshing perspective to the debates. The engagement model can be “stretched” in this way in three ways: alter the tone; change the rhythm; expand the forums. (The above three points are derived from the framework provided by Kachaner & Deimler, 2008.)

2.4 Foresight

Foresight has been explained in different terms in the literature:

- "A panorama of the possible future of a system intended to enlighten the consequences of possible action strategies" (Godet, 1986, p.32).
- "A reflection to enlighten the present action in the light of the possible future" (Godet, 1991, p. 10).

Foresight can be understood as a method of future exploration, opening oneself to possible futures (Said & Hellara, 2013). Strategic foresight is to consider how the current choice will affect the utility gained from future choices (Louviere & Meyer, 2008).

The notion of prediction has a different meaning as compared to foresight. Foresight is the ability to foresee or prepare wisely for the future while prediction is just an act of predicting based on one's own capability. The foresight process involves the utilization of common space for open thinking about the future. It involves intense iterative periods of open reflection, networking, consultation and discussion, to refine future visions and devise strategies to exploit opportunities in the long term, opportunities that have opened up due to the impact of science, technology and innovation on society (Slaughter, Riedy & May, 2009). The process is not only concerned with exploiting opportunities but also involves overcoming the hazards of uncertainty. The process is based on systematic, participatory future-intelligence-gathering and medium-to-long-term vision-building processes as well as informing present-day decisions and mobilizing joint actions (Miles & Keenan, 2002; Nugroho & Saritas, 2009; Sarpong & Maclean, 2014). This is done through examining various source of knowledge, examining a wide range of factors involved in social, technological, economic, ecological, political and other value systems, drawing on widely-distributed knowledge and the institutionalization and creation of networks (Nugroho & Saritas, 2009).

Foresight has also been understood as a method of future exploration and anticipation to enlighten one about possible futures; it is considered to be a process of intellectual innovation which consists of understanding the future (Said & Hellara, 2013). Foresight becomes strategic when a company is interested in the possible evolutions of its environment as well as its own dynamics (Said & Hellara, 2013). Foresight considers the future to be a multiple reality, meaning that there is no one future and a question or a problem can have multiple solutions (Mojica, 2010; Said & Hellara, 2013; Sarpong, Maclean & Alexander, 2013). This kind

of exercise often involves multiple actors shaping the company and its environment through a collective reflection on the possible future in order to direct the strategy of the organization (Said & Hellara, 2013).

Foresight has also been understood as behaviour (Amsteus, 2008), as 'regard or provision for the future' (Anderson, 1997, pp. 665-677) and as an 'act or power of foreseeing; prescience; an act of looking forward; a view forward' and 'provident care, or prudence' (Slaughter, 1996, pp. 156-163). It can be understood as the ability to see through the seeming perplexity, to spot developments before they become trends, to see patterns before they completely emerge, and to grasp the relevant features of social currents that are probable to shape the direction of future circumstances (Tsoukas & Shepherd, 2004). The concept has also been explained as one not concerned with knowing the future, as there can be various futures, but to be prepared for the future, to be able to put in place a strategy that can recognize and exploit the future and future opportunities as they emerge (Amsteus, 2008; Georghiou, 1996; MacKay & McKiernan, 2004; Sarpong, Maclean, & Davies, 2013). Similar to the previous understanding, it has also been understood as a tool for shaping the future (Anderson, 1997).

Thus, foresight deals primarily with a number of possible futures to try to either achieve one or deal with one that manifests. It is part of human perception and cognition and actions and decision are made by looking and analysing the past and what is expected in the future (Alsan & Atilla Oner, 2003; Amsteus, 2008; Sarpong, Maclean, & Davies, 2013; Slaughter, 1996). Foresight is about thinking about the future, weighing possible benefits and disadvantages of different courses of action that can be taken, and investing in possible futures

(Major, Asch & Cordey-Hayes, 2001), it is about understanding that there are many possible futures and trying to develop a range of views of how the future could develop (Horton, 1999). Slaughter (1996) argues that foresight pushes the boundaries of perception forward in at least four major ways: First, consequence assessment by assessing the implications of present actions, decisions, etc. Second, early warning and guidance by detecting and avoiding problems before they occur. Third, pro-active strategy formulation by considering the present implications of possible future events. Fourth, normative scenarios by envisioning aspects of desired futures. Scenarios can be very important for understanding complex context, including complex relationships between uncertainties, objectives and strategic options, which are essential elements in analysing strategic options (Goodwin & Wright, 2001; Ram, Montibeller & Morton, 2011; Weigand, Flanagan, Dye & Jones, 2014; Wright & Goodwin, 1999). They are important in directing attention to critical issues and uncertainties, in defining strategic priorities especially in cases where multiple objectives exist; and provide a way to create, test and refine strategic options and also highlight the strength and weaknesses of available options and help in deciding which to follow (Ram et al., 2011). Importantly, foresight cannot be identified with any single act or action; “It is quintessentially a directed process which broadens the boundaries of perception through careful scanning of possible futures and the clarification of emerging situations” (Slaughter, 1996, pp. 156-163).

2.5 Strategic Foresight

In very simple but highly ambiguous terms strategic foresight can be understood as the amalgamation of strategy and foresight, an explanation which

requires an understanding of strategy, strategic thinking and foresight. Strategic foresight is “a set of strategic tools that support decisions with adequate lead time for preparation and strategic response” (Calof & Smith, 2010; Ho & O'Sullivan, 2017; Kim, 2012) and managers play a vital role in this exercise (Göl Beser & Amsteus, 2011). The idea is that diverse futures, and thus choices presented through the foresight process, requires lessons learned by strategy processes, which will allow the firm to decide on a course of action that will provide the best possible outcome. In today's world of uncertainty just knowing the future is not possible, for there often is not a future but diverse futures, any one of which can come to be, and it is not a simple matter of setting a course based on a single anticipated future. What is required is a process of strategic thinking opening oneself to diverse options and analysing the ones considered most plausible and then preparing accordingly (De Wit & Meyer, 2010).

Strategic Foresight is a systematic approach to looking beyond current expectations and taking into account a variety of plausible future developments in order to identify implications for policies today (OECD, 2019). Strategic foresight is a phenomenon which informs the organization of future events, opportunities and threats, reduces its ambiguities, doubts, and concerns and enhances the ability of the organization to make intelligent choices (Eskandari, Mohammadi, and Rahimi, 2020). Strategic foresight involves multiple stakeholders and creates value through providing access to critical resources ahead of competition, preparing the organization for change, and permitting the organization to steer proactively towards a desired future in order to achieve prosperity (Baskarada, Shrimpton, Ng, Cox & Saritas, 2016).

The concept of strategic foresight addresses the problem of a constantly changing environment, derivation of competitive advantage, market position and firm superior performance (Rohrbeck, Battistella, & Huizingh, 2015). It enhances the identification, observation and interpretation of corporate environmental changes and potential opportunities by determining possible implications as well as responses (Baskarada et al. 2016; Sardar, 2010). Generally having a long-term orientation, strategic foresight involves broadening the menu of policy options and taking into account future scenarios that might affect present decisions and enhance firm superior performance (Baskarada et al., 2016).

Currently, to stay in the competition cycle, managers must have the power to create effective strategies. Managers can creatively position their organization in a better condition than their competitors. Managers who have the strategic intelligence to take advantage of this element can create appropriate strategies and provide grounds for the growth and development of the organization (Salehinezhad, 2015).

Thus, strategic foresight is the ability to create and maintain a high-quality, coherent and functional forward view and to use the insights arising in organisationally useful ways; for example: to detect adverse conditions, guide policy, shape strategy; to explore new markets, products and services. It represents a fusion of futures methods with those of strategic management (Adegbile, Sarpong & Meissner, 2017; Arnold, Erner, Möckel & Schläffer, 2010; Bootz, 2010; Slaughter, 1997). These future methods will include an escape from an ideology of exploitation which takes economic/material gain as the ultimate aim, resulting in the commodification of human needs, reduction of natural

entities as mere resources, exploitative trade practices and disregarding the negative effects on future of the planet and its inhabitants (Coates, Durance, & Godet, 2010; Costanzo, 2004; Csaszar & Laureiro-Martínez, 2018; Slaughter, 1997). Thus strategic foresight provides a way to come to grips with and take into account such important issues as the concern about human purposes and environment, cultural evolution and sustainability (Fink & Schlake, 2000; Slaughter, 1997). Strategic foresight, however, is not merely concerned with such long-term issues, but also includes a set of principles for ensuring the viability of the organization in the short-term, medium-term and present environment. It also includes strategies for opening up ‘future competitive space’, foresight to develop new products, and/or practices, without the prompting of competition and market demand, which will provide it a competitive edge and space over others, being the first in the field (Hammett, 2004; Slaughter, 1997). This does not mean that the organisation will be ignoring the market, rather it would be anticipating demand before its competitors and devising a future plan without the pressure of responding to the changed market in which the competition has already entrenched itself, or at the very least is on its way to such an entrenchment. It makes the organization aware of potential dangers and opportunities (Fink & Schlake, 2000).

Strategic foresight comprises of processes that provide adequate time for preparation and strategic response to changing context, an activity in which managers play a vital role (Calof & Smith, 2010; Kim, 2012; Göl Beser & Amsteus, 2011). Strategic foresight entails of activities and processes that assist decision makers in the task of charting the company’s future course of action, to provide

early warning techniques and competencies to make decisions to achieve future objectives in today's rapidly changing global business environment (Mackay and Costanzo, 2009; Vecchiato & Roveda, 2010). In addition, it provides the firm the tools to be aware of potential dangers and opportunities (Fink & Schlake, 2000).

Strategic Foresight deals with the identification, assessment and usage of weak signals to recognize and give warning about threats and opportunities at an early stage (Arnold et al., 2010). Sources of weak signals are the political, socio-cultural and competitive environments as well as science and technology. Strategic Foresight defines the methods, the actors, the process and the system needed to enhance the competitive position of a company. Strategic Foresight can be directed (monitoring, issue driven) or undirected (scanning) (Rohrbeck et al., 2007).

Strategic foresight is the ability to try to take into account all the variables to achieve a certain semblance of control and thus certainty in a rapidly changing environment. Strategy is defined as strategy as control; strategy as practices that help agents "populate" their world. It includes the need for information, exploration and experimentation: but information takes on meaning only through interpretation, and interpretation starts with an ontology: who and what are the people and things that constitute the agent's world, and how do they relate to one another? and; strategy as fostering generative relationships (Maxfield & Lane, 1997).

Strategic foresight is not merely concerned with long term issues, but also assists firms in achieving and maintaining their competitive advantage in the short-term, medium-term and present environment (Ringland, 2010). It can provide a firm with the ability to develop new products, and/or practices, without

the prompting of competition and market demand, which will provide it a competitive edge and space over others, being the first in the field (Slaughter, 1997). Strategic foresight provides the ability to take into account as many variables as possible to achieve a certain semblance of control and thus certainty in a rapidly changing environment (Maxfield & Lane, 1997).

Strategic foresight provides a framework for identifying early warnings, developing mental models to respond to these warnings, devising strategies and strategic plans to efficiently address the possible innate complexities in these warnings, and creating sound metrics for monitoring the actions taken (Courtney, 2001; Fink, et al., 2005; Makridakis, 1990; Schoemaker & Gunther, 2002)

Strategic foresight uses diverse tools including scenario planning, technology scouting and technology based product and service innovations to allow the firm to learn to identify and enact strategic initiatives to ensure growth and survival of the organisation (Mackay & Burt, 2014). These techniques can vary in terms of complexity and sophistication, and rely on both qualitative approaches, such as expert opinion, and quantitative techniques, such as extensive use of statistical and computational tools (Vecchiato, 2012; Hirsch, Burggraf & Daheim, 2013). The techniques rely both on being prepared and responsive (Smith, 2005). A number of procedures for strategic foresight process have been identified (for details see Inayatullah, 1998; Saritas, 2006; Godet, 1986; Miles & Keenan, 2002; Miles & Keenan, 2002; Fink, Siebe & Kuhle, 2004). Strategic foresight processes can primarily be based on scenarios (Fink, Siebe, & Kuhle, 2004). They can also include multi-step processes that involve mapping, anticipating, timing, deepening, creating alternatives, transforming (Inayatullah, 1998); understanding, synthesis and modelling, analysis and selection, transformation, action (Saritas, 2006);

future workshops, historical analysis, morphological and Delphi analysis of scenarios, multicriteria analysis of future options (Godet, 1986); pre-foresight (scoping), recruitment, generation, action, evaluation and renewal (Miles & Keenan, 2002).

There are a number of strategic foresight techniques that a firm can employ to succeed in the foresight exercise and develop it as a competency. To be successful, however it would require some form of strategic learning. Strategic learning has been described as “learning which informs and influences the identification and enactment of strategic initiatives intended to deliver future capacity for organisational growth and survival” (Mackay & Burt, 2014, pp. 546-564). The foresightful strategic learning can be achieved through a process of ‘assemblage’, that is the connecting, disconnecting and reconnecting of events across time and space to bring about momentary insights about an organisation’s fluxing context, and the tools used in such a process include scenario planning, technology scouting and technology road mapping (Mackay & Burt, 2014).

In fact qualitative or quantitative scenarios (where a numerical model is used showing a mathematical link between influencing factors and between these factors and the system’s key indicators and output factors) have been shown to increase the effectiveness of thinking during corporate strategic planning (Iden et al., 2017; Luis Cordeiro, Hirsch, Burggraf & Daheim, 2013). The techniques can be explorative or normative (Vecchiato, 2012). Exploratory techniques are concerned with questions what may possibly happen based on factors at play, and start with past and then present moving towards future by looking at all conceivable possibilities (Vecchiato, 2012). Normative techniques on the other hand are goal orientated, keeping in mind the firm’s purpose, goal, its expected achievements

and outcomes and whether the stated objectives can actually be achieved considering the firm's available capabilities and achievements (Hitt & Tyler, 1991; Lindenberg & Foss, 2011).

Strategic foresight requires that managers and those engaged in the exercise make certain adjustments in their way of thinking. First, it must be accepted that preparation is not always the answer, those engaged in strategic foresight must also learn to be responsive (Smith, 2005). Second the emphasis should also shift towards "phase transition", "where the edge of chaos can provide a platform for the emergence of innovative ways of looking at organisational problems" (Smith, 2005, pp. 22-30). There should be a balance between equilibrium and disequilibrium, this does not mean that chaos be allowed to reign free and operation management cease, but rather that the senior management should foster an environment of innovation and creativity by managing the boundaries that govern equilibrium (Smith, 2005). They can try to facilitate employees to come with innovative solutions; in fact it is often the case that self-organised groups who take it upon themselves to solve problems with little direction can often give rise to innovation (Smith, 2005).

There are a number of procedures that have been identified in the literature that can be used for the strategic foresight process. The following section lists some of them.

Inayatullah (1998) identifies six pillars that can be used for strategic foresight process including:

1. Mapping.
2. Anticipating.
3. Timing.

4. Deepening.
5. Creating alternatives.
6. Transforming.

For Saritas (2006) the foresight procedure can be achieved through a five mental act thought procedure:

1. Understanding
2. Synthesis and modelling
3. Analysis and selection
4. Transformation
5. Action

Godet (1986) proposes a four-stage process:

1. Futures workshops to classify the key variables.
2. Historical analysis to assess the trends and the actors' strategies.
3. Morphological analysis and Delphi to filter out unlikely scenarios.
4. Multi-criteria analysis to generate and assess future options.

Miles & Keenan (2002) use a five-step foresight process:

1. Pre-foresight (scoping):

This pre-foresight stage involves 'scoping' activities i.e. taking decisions on shape and size of the exercise, defining the rationales and objectives of the program, assembling the project team and designing the methodology for the process. The aim is to meet the requirements and objectives of the firm with an appropriate methodological design.

2. Recruitment:

At this stage the participants of the foresight program are identified and made part of the process.

3. Generation:

This is the actual foresight stage, where the existing knowledge is gathered, analysed and synthesized, while new knowledge is created, future objectives/mission/etc. set and actions plans made. A number of methods can be used at this stage including but not limited to bibliometric and content analysis, interactive discussions (e.g. in the form of brainstorming), scenario planning, surveys, etc. to generate foresight outcomes.

4. Action:

This is the actual implementation phase where actions are taken to convert the existing system into the shape desirable for the future as defined and shaped during the foresight phase. The actions taken to bring about the desired change can lead to transformation in goals; organizational structures, procedures, rules and regulations; organizational and individual behaviours, culture and values.

5. Evaluation and renewal:

This is the last stage and covers evaluation of the entire process to analyse whether the exercise archived the desired results. The entire process will be cyclic in nature if the firm intends to maintain competitive advantage.

Fink, Siebe & Kuhle (2004) also provide an example of strategic foresight process based primarily on the use of scenarios to deal with uncertainty. The idea is that firms should not strive for a single visionary view, which most likely corresponds with their expectations, but instead they should try to acquire multiple views that describe the whole “window of opportunities” (Fink et al., 2004, pp. 173-185). The first thing that firms would need to do is to refrain from engaging in suppression of uncertainty, suppression of complexity and suppression of change, they should be able to give up one-sidedness of monetary

thinking and define a multiple stakeholder-perspective within their strategic thinking (Fink et al., 2004).

Scenarios are developed in a four-step process. The first step is identifying ‘key factors’ in the “scenario fields”, that is identifying *only* those factors that will have a strong influence on the scenario fields, for it would lead to an absurd amount of complexity if all factors were to be taken into account, taking all factors into account would require omniscience.

The second step is the ‘foresight of alternative projections’ which includes identifying the time in the future that should be described by scenarios and then the possible developments of all key factors are identified.

The third is ‘calculation and formulation of scenarios. Two goals determine the third step: on one hand each scenario should represent a possible and consistent future situation and on the other hand the set of scenarios should represent the best “window of possibilities”. These scenarios can be developed in two ways, intuitive development or systematic development. It is “gurus” who develop scenarios on their own (external development) or by dialogue, where interactive dialogue within a group leads to scenario development (internal development). Systematic development occurs when an external expert or consultant develops a scenario through a study; internally it can be developed by working groups through scenario conferences and projects.

The final step is ‘analysis, mapping and interpretation of scenarios. In addition to the scenario formulation, each scenario can be analysed in detail: What are the scenario drivers? Who are the winners and losers in the scenario? What happens if disruptive factors are included – and how robust is the scenario? What are the possible sub-scenarios? A second set of questions could be asked when

concerning the consequences of the scenario: What are the chances and risks that result from the scenario? What would the organisation have to do if it is assumed that this scenario appeared?

The next important step after scenarios have been developed is to use the future-related knowledge gathered to stimulate the firm's executives to rethink their business premises so as to lead to future oriented decisions. This is where the firm needs to engage in strategic analysis of the scenarios. Based on the scenarios the firm needs to detect its options, either by engaging in SWOT analysis or market scenario analysis and by analysing the current situation as well as the external and internal perspective on the future. The firm would then be in a position based on the agreed upon objectives, visions and missions to develop a strategy that can achieve those objectives, visions and missions using the knowledge gathered through scenarios.

Voros (2003) provides a four phase foresight framework, using Horton (1999), Mintzberg (1994) and Slaughter (2000) --- inputs; foresight; outputs; and strategy (Appendix-2). The concept of strategic foresight has been discussed widely in the extant management literature. However, as far as we are aware no single instrument has been developed to empirically measure strategic foresight. Hence, before assessing the impact of strategic foresight on organizational performance, the study proposes a new measure of strategic foresight. Measuring strategic foresight is significantly important since strategic foresight facilitates organizations when identifying and responding to new business and competitive opportunities in an uncertain environment (Dvir, Segev, & Shenhar, 1993; Veliyath & Shortell, 1993).

2.6 A Practice Approach to Strategic Foresight

Inspiration for this thesis comes from the practice turn in contemporary social theory and uses it as an alternative lens for understanding strategic foresight. Practices make clear the epistemic difference of the reality of practices for showing what people say they do and what they actually do (Mackay & Burt, 2014; Knorr-Cetina, von Savigny & Schatzki, 2001; Schatzki & Schatzki, 1996). This is the difference that gives way to the routines of human actors in enacting their actual practices (Cetina, Schatzki & Von Savigny, 2005). Here, practice becomes a routine type of behaviour in which different elements play their pivotal role. These different elements reinforce each other and are interdependent to each other such as body activities, then comes the activities of mind, then comes the knowledge and understanding, the role of will power and the role of motivational knowledge (Reckwitz, 2002). In this way, practices are the meeting point where both ways of doing and speaking overlap and interconnect. Practices permeate all social life and unfold themselves in the tunnel of time (Olssen, 2016). In this way, they facilitate in shaping the bundles of human actions in their situated activities. Strategic foresight describes that human capacity by which humans deal with uncertainties and become able to connect past with present and then present with the future (Tsoukas & Chia, 2002). In this way, it is a kind of social practice that human actors actualize in the continuous process of becoming. Strategic foresight is an on-going social practice in which routines and different activities take place on a daily basis. Behind these activities, sometimes there is little reflection and we do not know the unintended outcomes from the unintended actions. Here, the practice approach to strategic foresight gives an ontological

priority to those organizing patterns that take place by human actors. Here comes the epistemological primacy when human actors try to understand the future of business environment engulfed in uncertainty (Schatzki & Schatzki, 1996).

Today the term strategic foresight is widely used to designate the activities and processes that assists the project manager in the task of charting the organization future course of actions (Vecchiato, 2012). Strategy as Practice can be regarded as an alternative to the mainstream strategy research via its attempt to shift attention away from a 'mere' focus on the effects of strategies on performance alone to a more comprehensive, in-depth analysis of what actually takes place in strategy formulation, planning, implementation and other activities that deal with the thinking and doing of strategy (Golsorkhi, Rouleau, Seidl & Vaara 2010).

The strategy practice research (also called as "strategy-as-practice" or "sap" research) has traditionally focused on strategy practices (routinized types of behavior and tools that are used in strategy work), strategy practitioners (actors that are involved in strategy work), and strategy praxis (strategic activities conducted in organizations) (Vaara & Whittington, 2012; Whittington, 2006). Researchers like Burgelman et al. (2018) identified five streams or substreams of research on strategy practices which includes on (a) social and organizational practices in strategy-making, (b) roles and identities of the practitioners, (c) sensemaking, discourses and narratives, (d) sociomateriality and strategy tools, and (e) power and criticality in strategy work (Burgelman et al., 2018).

Furthermore, In the research work pertaining to visualizing strategy tools of Paroutis et al. (2015), they define strategy tools as the concepts, models and methods employed by managers during strategy making, e.g. the BCG matrix,

Porter's five forces and SWOT (Jarratt and Stiles, 2010; Wright, Paroutis and Blettner, 2013).

In this thesis, strategic foresight is those bundles of human actions and practices in organizational context where creative evaluation takes place for the productive outcomes and for reconfiguring all kinds of sources of potentialities into future resources. The study also obtains inspiration from contemporary practice thinkers (e.g. de Certeau, 1984; Dreyfus, 1991; Lave & Wenger, 1991). These thinkers believe in relational ontology and think that practices are flexible and relational in context. They treat human activities, human values, human beliefs, human relationships and background knowledge in terms of organizing logics or the elements of the field of practices (Schatzki & Schatzki, 1996). According to them, these components play a central role for foresight as a social practice where foresight came into being, is then reproduced and adapted (Knorr-Cetina et al., 2001; Rasche & Chia, 2009). In this way, primacy is not only given to human consciousness but also to human dispositions, human habits and to those human reflexive ways of thinking that give rise to foresightful actions in theories and practices (Bourdieu, 1990; Raelin, 2007; Sandberg & Tsoukas, 2011).

This study investigates management practices and strategic foresight as potential enablers for a more robust standpoint towards a firm's sustained competitiveness. Using the Pakistan textile industry as a case study the research examines the two concepts from a resource-based view as higher level competencies.

The purpose of the study is to gauge the importance of factors that can effect performance of the firm in the long run. Literature shows that there are two sources which can affect the firm's performance on a long term sustained basis -

environmental factors and internal factors (Kim, 2012). It is true that some firms benefit from environmental changes over time, benefiting from fortuitous, opportune and serendipitous environmental or external factors, however, these factors only have lasting impact if the firm is able to properly adapt to the changes (Kim, 2012). Thus, apart from examples of pure luck, superior performance of a firm is based on certain capabilities residing within it. This study argues that management practices and strategic foresight are such capabilities, in fact as with any high-level competency it is of utmost importance in turbulent and uncertain environments that most firms face, especially the textile industry in Pakistan, the focus of this study. The argument is that management practices and foresight, primarily strategic foresight can create competitive advantage, and if competitive advantage was not based on the firm's foresight ability it would mean that performance was based on just luck (Ahuja, Coff, & Lee, 2005).

2.7 Management Practices

This thesis is an attempt to understand management practices in combination with strategic foresight and explain how management practices can lead to improved organizational performance, providing firms with an edge over rivals in an uncertain environment.

Management is the process of “getting things done effectively through people” (Ng, 2011, p. 1), and thus is closely linked to leadership, in fact effective management practices are based on good leaders, who can use their people skills to achieve optimal results (Ng, 2011). Management practices are seen as important drivers for improvements in productivity (Mol & Birkinshaw, 2009), and their implementation is an important issue for firms which are seeking to upgrade

their productivity, improve the quality of customer offerings and retain competitiveness (Ichniowski et al., 1995; Pil and MacDuffie, 1996).

Managers who are of high quality and put greater effort into their activities, will create better managerial practices in organizations (Bloom & Van Reenen, 2007), in fact management practices based on “quality leadership” and “employee involvement” are very important for quality performance (Malmadana Kapuge & Smith, 2007). Certain types of management policies are associated with higher levels of productivity, profitability, innovation, and growth, while others can have an adverse effect (Bloom, Sadun, & Van Reenen, 2017). Leadership plays an important role in any type of management practice, since leaders can create conditions for effective use of participants’ talents or create barriers in such use (Donate & de Pablo, 2015). So, for example, leaders relying on conservative management practices and reactive-type strategies have been linked with poor performance, while those shown to be entrepreneurial in their management practices and who pursue proactive strategies are linked to high performance (Covin, 1991; Kotey and Meredith, 1997). However, this does not mean that management practices are just the attributes of the top managers, they are also part of the organizational structure and behaviour of the firm, evolving slowly over time even as top management changes (Bloom & Van Reenen, 2007).

Correctly adapted and implemented management practices are essential for competitive advantage, and they require alignment between the external environment and internal strategy (Newman & Nollen, 1996). Current literature thus emphasises both the external analysis (analysis of the industry and competitor environment) and internal analysis (analysis of the firm’s resources

and capabilities) for the firm before formulating strategy and deciding on management practices (Rothaermel, 2013). Such formulation requires not just formulation of unique strategies but also proficient implementation of such strategies (Krishna Shrestha & Ram Gnyawali, 2013). Good management practices are associated with well-developed plans, good employee and customer relations, quality products and valuable external contacts (Malmadana Kapuge & Smith, 2007). Good management practices create an environment free of roadblocks to high performance, through ensuring that each employee knows what is expected of her/him and has the resources to fulfil those expectations, and these practices require that managers reinforce appropriate behaviour (Medlin, Green, & Wright, 2016).

There is rapidly growing literature on how management practices are an important influence on variations in productivity across firms and countries (Bloom et al., 2011; Bloom et al., 2010; Bloom, Schweiger, & Van Reenen, 2012; Chang, 2016).

Prior studies have identified several forms of management practices. For example, Joyce et al. (2003) identified eight general management practices: strategy, execution, culture, structure, talent, innovation, leadership, mergers and partnerships, to have a strong correlation with sustained business success. High performing firms can be distinguished from low performing firms on how well they undertake these management practices (Grønholdt & Martensen, 2009). Similarly, Ng, (2011) shows that leaders can adopt and easily implement the following nine management practices that can help to achieve successful outcomes: visionary big picture orientation, a sense of curiosity and inquisitiveness, importance of being observant, attention to detail, manage with

visibility and enthusiasm, crisis management skill, manage with openness and set an example, the art of delegation and communication skills, talent cultivation and mentoring. Strategic management practices focus on organization-wide priorities and resource allocation decisions, providing overall direction and ensuring integration of the diverse functional areas, thus affecting ultimate performance of the organization (Krishna Shrestha & Ram Gnyawali, 2013). Bloom & Van Reenen (2007) identify 18 key management practices that can be measured and analysed for effects on productivity and performance across firms (Appendix-1). These 18 key management practices identified by Bloom & Van Reenen (2007) are based on previous research in management practices, including research on repeated and persistent organisational processes such as research on dynamic capabilities, research on resource-based view (RBV) of the firm, and research on HR practices and HRM.

For example, certain management practices in Bloom & Van Reenen (2007) are similar to the approach identified in (Eisenhardt & Martin, 2000). Eisenhardt & Martin (2000) explain how dynamic capabilities often emerge as a result of path-dependent histories of individual firms, how routines can help in emergence of dynamic capabilities in firms. Such routines can include individuals in a firm working together in teams as a routine to overcome problems or to develop new products or processes, and such dynamic routines help to establish innovation capabilities in the firm as it breaks down barriers and leads to the creation of a common experience base and language amongst people from diverse backgrounds within the firm (Eisenhardt & Martin, 2000).

Similarly, the management practices identified by Bloom & Van Reenen (2007) are influenced by research on RBV by (Barney & Arian, 2001) . For example

Barney & Arikan (2001) explain how managers should identify those valuable and rare resources that their firm does not have and then try to duplicate them either through imitation or substitution. They also points towards how managers can also try to ensure that those resources providing a firm competitive advantage should be nurtured (Barney & Arikan, 2001).

Equally, the Bloom & Van Reenen (2007) study derives direction from the HRM literature to focus on practices targeting human capital: how to measure performance, how to retain, attract and manage human capital and how to let it go if no longer effective. (For detailed discussion on HRM see Lengnick-Hall, Lengnick-Hall, Andrade, & Drake, 2009.)

Management practices can also be divided into 38 practices grouped into five areas as done by Bloom et al. (2011). These groups include:

- Factory operations: maintenance of machines and keeping a log of reasons for breakdowns to learn from failure. Keeping the factory floor organised to reduce accidents and ease movement of resources.
- Quality control: this included maintaining records of defects by type, analysing these records daily, and formalizing procedures to address defects to prevent them recurring.
- Inventory: using best practices in stock and inventory management, analysing which such practice or practices will be optimal for the firm.
- Human resource management: this includes presence of clear job descriptions and duties for employees and use of performance-based incentive system.
- Sales and order management: using best practices or a combination of such practices to optimize management of sales and orders. Use of design-wise efficiency analysis to set price rather than just production costs.

Similarly, an increasing amount of literature has shown how human resource management practices can have a significant impact on a firm's performance. Human resource management, strategic human resource management and use of other forms of human resource practices have been shown to produce a positive effect on a firm's performance (Becker, Huselid, Becker, & Huselid, 1998; Epstein, 2018; Lengnick-Hall et al., 2009; Moore & Jennings, 2017).

Over the past decade Bloom and his colleagues have conducted extensive studies on management practices throughout the world (e.g. Bloom and Van Reenen, 2007; Bloom et. al., 2010; Bloom et. al., 2012a; Bloom et. al., 2012b; Bloom et. al., 2013; Bloom et. al., 2016; Bloom et. al., 2017). Bloom and Van Reenen (2007) found that in a number of developing countries firm productivity was strongly linked to management practices. Further, that firms that were family owned and passed down management through primogeniture were on average more poorly managed, as were the firms that existed in a market with weak competition. The findings of this study accord with the findings of studies conducted by Bloom (2016). Thus, for example for Pakistan the firms that adopted structured management practices were more productive than their counterparts (Bloom, Sadun, et al., 2016). However, Bloom et. al. (2016) also concluded that those firms which did not adopt structured management and had low productivity were still able to exist in the market for longer compared to comparable firms in other countries because of weaker competition and greater protection afforded to national firms from international competition. Interestingly the existence of better management practices was not predicated on whether the firm was listed on the stock exchange, but rather on how old the firm was, whether it was

engaged in exports, whether it had more skilled managers/non-managers, and on its business and political connections (Bloom, et al., 2016).

The studies mentioned above found that better management practices were linked to a number of factors:

Firms facing higher levels of competition had better management practices than those operating in markets with lower levels of competition (Bloom et al., 2017; Bloom, et al., 2012; Bloom & Van Reenen, 2007). A higher level of competition can drive out poorly managed firms, leaving better managed firms (Bloom, et al., 2012; Bloom & Van Reenen, 2007). Similarly, greater competition also forces the managers to change their style, increase their performance, in order to survive and prosper in a highly competitive market, and even in markets that such managers perceive to be highly competitive (Bloom, et al., 2012).

Family owned firms and government owned firms tend to be badly managed compared to multinational, dispersed shareholder, and private equity owned firms, which tend to be better managed (Bloom et al., 2012). Similarly, family-owned firms, where the chief executive officer (CEO) is chosen by primogeniture are usually poorly managed (Bloom and Van Reenen, 2007; Bloom et al., 2012), when compared to family owned firms run by non-family member CEOs (Bloom et al., 2012).

The average educational qualification of employees is also linked to the quality of management practices (Bloom et. al., 2012; Bloom et. al., 2017). Firms with a greater number of college educated employees tend to be better managed than their counterparts, this may be because such employees are more familiar with

best practices in their industry and more supportive of implementing such practices (Bloom et. al., 2012).

Another factor that correlates with why certain firms are badly managed has to do with informational constraints (McConnell, Lindrooth, Wholey, Maddox, & Bloom, 2013). Many owners and managers of badly managed firms do not believe that adopting good management practices will improve their profits/performance, and thus see no reason to adopt them (Bloom et. al., 2013). Another reason for not adopting good management practices, especially those which are uncommon, is that most managers do not even know about them and how they can improve performance and profitability (McConnell et al., 2013).

Before successful implementation of management practices it is important that the local culture is understood (Gupta & Kleiner, 2001). When management practices are inconsistent with deeply held values, employees are likely to feel dissatisfied, distracted, uncomfortable, and uncommitted, and as a result, they may be less able or willing to perform well. Management practices that require employees to behave in ways that are consistent with extant national cultural values, and allows them to focus on their work will lead to increased performance (Newman & Nollen, 1996). Thus, culture is also important in management practices. Research on management practices in different countries has consistently shown that a firm scoring highly on management practices has better performance than its counterparts, within a country and across countries. For example, Bloom,, et al. (2016) for Pakistan; Bloom, Sadun, & Van Reenen (2016) for US as compared to other countries; Bloom, et al. (2012) for various countries; Bloom et al. (2011) for India; Bloom et al. (2010) for firms in UK and how firms

scoring high on management practices are not only more productive but also more energy efficient, leaving a smaller carbon footprint.

The thesis does not argue whether one set of management practices is better than another. However, it will examine the relationship between various management practices and strategic foresight with organizational performance. Furthermore, the relationship between management practices and performance will also be considered. An attempt will be made to understand which practices and how strategic foresight play a role in a firm's performance.

Prima facie, it is assumed in the study that management practices that appear to mesh with and influence strategic foresight include 'routines'; performance problem documentation; performance review and dialogue; consequence management; target time horizon; performance clarity; managing human capital; rewarding high performance; training of human capital; team building practices; practices designed to identify, assess and use weak signals; practices designed to help agents "populate" their world (this includes need for information, exploration and experimentation); practices designed to foster generative relationships; practices designed to achieve 'assemblage' (that is the connecting, disconnecting and reconnecting of events across time and space to bring about momentary insights about an organisation's ability to metamorphosis these events into one; practises designed to promote scenario planning, technology scouting and technology road mapping; practises designed to encourage futures workshops to classify key variables and historical analysis to assess trends; practices designed to foster an environment of innovation and creativity by managing the boundaries that govern equilibrium.

2.8 Company Performance

Central to the idea of company performance is the idea of value (Harrison & Wicks, 2013). In free markets, consumers will choose that which will provide them the most value for what value they exchange for it (McFadden, 2006). Therefore, if firms want to perform well they need to improve the goods or services they provide so that they better appeal to their customers, i.e. a firm should provide products of greater value than competitors so that consumers do not shift to other choices (Harrison & Wicks, 2013).

The central premise to firm performance will be to focus on all stakeholders and create value along a number of dimensions (Freeman, 2010). Understanding firm performance is not necessarily limited to just financial performance. It can include in addition to stakeholder utility associated with actual goods and services, stakeholder utility associated with organizational justice, stakeholder utility from affiliation, and stakeholder utility associated with perceived opportunity costs (Harrison & Wicks, 2013). Thus, measuring firm performance can take place over a number of matrices. Measuring performance would mean quantifying the efficiency and/or effectiveness of action over a certain metric (Melnyk, Bititci, Platts, Tobias, & Andersen, 2014). Therefore, depending on the strategy being used by a firm to improve its performance will require different types of performance measures (Teeratansirikool, Siengthai, Badir, & Charoenngam, 2013).

Consequently, understanding company performance is not necessarily limited to just financial performance. Therefore, depending on the strategy being used by a firm to improve its performance will require different types of performance measures (Teeratansirikool et al., 2013).

Hence, a firm can measure its performance based on stakeholder theory, for which its performance measurement will require that it takes into account the factors important to the relevant stakeholder, such as its carbon emission figures for a local environmental body, while for its shareholders it would be its capital growth and dividends. Similarly, it could be a defender firm, a firm which is a survivor aiming to protect its current business and focus on manufacturing existing designs more efficiently through competitive pricing, and thus will use financial measures (Teeratansirikool et al., 2013). Or it could be a prospector firm, a firm which continuously explores and exploits new products or market opportunities to achieve high growth, and may use measures in addition to financial ones to measure its performance, such as, new patents and designs, or entrance into new markets (Teeratansirikool et al., 2013). The study used perceptual measures that assesses the respondents' perception about the financial performance of the firm.

2.9 Government and Environment and Company Performance

The performance of a firm has largely been associated with its business environment. Business environment have significant contingent effects on the firm's performance. For instance, research was carried out by Prajogo (2016) on Australian manufacturing firms. The purpose was to examine the role business environments (in terms of dynamism and competitiveness) as contingency factors which affect the effectiveness of different types of innovation strategies (in terms of product and process) in delivering business performance. The results revealed that dynamic environments strengthen the effect of product innovation on

business performance. Competitive environments, on the other hand, strengthen the effect of process innovation on business performance.

The role of government actions cannot be neglected in the business world. It was reflected in prior literature that there is a positive effect of government rules and regulations in the economic development of a country (Liu, 2013; Si et al., 2010; Tao, Garnsey, Probert and Ridgman, 2010) however many other researchers stated that this effect was remained negative or insignificant (Hafeez, 2013; Korai, Mahar and Uqaili; 2017). Prajogo (2016) argued that firms' actions are affected by different external factors including legislation. In addition, a study conducted by Tao et al. (2010) to analyse the effect of government action on an automotive firm's innovative performance. In their findings the effect of government legislation and regulations on the firm's performance was found significant. In addition, government legislation has played a key role at the macroeconomic level and regulates the domestic market in order to get optimum competitive advantages (Si et al., 2010). Moreover, in his study Liu (2013) highlighted the significant role of Chinese government regulation and its application to different industrial sectors. Liu (2013) further stated that government legislation could enable the organizational leaders in the direction of development, so that they have a clear vision in actively taking on the challenge of crisis and making the right adjustments in dealing with the crisis (Liu, 2013).

Pakistan has developed laws, established government agencies and accepted technical assistance from donors like the World Bank in order to respond to environmental problems. Despite that, the response remains fragmented and environmental laws, regulations and other initiatives have not solved the problem (Korai, Mahar and Uqaili; 2017). Hafeez (2013) reported that there are a plethora

of regulations in Pakistan but their applications are still far from becoming the reality for the country and they are only at the implementation stage across the country.

For example, Helm (2007) claimed that a company with a good reputation is perceived to be 'less risky than companies with equivalent financial performance, but with a less well-established reputation'. According to Post and Altman (1992) and Billing and Scott (1995) organizations that address environmental issues can affect the marketability of their products and their competitive position as well as their financial performance. In the case of a variable and unpredictable environment, the manager can choose one of three paths to proceed: (i) adopt a passive attitude - thus losing the position in the market, (ii) use past practices, often not adapted to current conditions, (iii) shape their future in a systematic, structured way, while taking advantage of upcoming opportunities in the environment (Ejdys, 2013).

In line with the literature, the following hypotheses are proposed.

H1: There is a significant impact of government and environment on firm performance

H1a: There is a significant impact of government actions on firm performance

H1b: There is a significant impact of investment environment on firm performance

H1c: There is a significant impact of business environment on firm performance.

2.10 General Strategy and Company Performance

The term strategy has been defined by various author in different context. For instance, according to David (2003) strategy is defined as a long-term plan of action designed to achieve a particular goal. Originally the term strategy was not

meant for business but rather borrowed it from the military thus helping organisations to bridge the gap between policy and tactics (Nickols, 2000). Hart (1992) provided an early definition of strategy as the art of distributing and applying military means to fulfil the end of policy. In his research Steiner (1979) provided the following characteristics in management application: strategy is what top management does that is important to the organisation, it refers to directional decisions to purposes and missions, it consists of important actions necessary to realise these directions.

The impact of general strategy on firm performance has been reflected in numerous studies. For instance, scholars like Parnell and Brady (2019) investigate the influence of different dimension of strategies (e.g. cost leadership and differentiation, political and social) and considers how these strategies impact financial and non-financial performance in firms and found multiple links between strategies and performance. In addition, scholars like Kotha, Rindova, and Rothaermel (2001) and Roberts and Dowling (2002) in the prospective of financial advantage found that firms focusing on strategy such as higher reputation enjoy higher sales growth and higher return on assets. Likewise, scholars like Eker and Eker (2016) explored the interactions of management control systems and strategy with their impact on firm performance are examined with an empirical analysis, based on the data from manufacturing. The results support the postulate that high level of interaction have been found between strategy and firm performance.

Similarly, scholar like Hasnu (2016) The purpose of their research was to investigate the relationship of strategy and performance in a multi-industry

setting by applying Miles and Snow typology using archived financial data. The empirical research evidence on strategy-performance relationship. Likewise, Saeidi et al. (2015) highlighted that different general strategies, such as competitive advantages, reputation and customer satisfaction enhanced firms performance.

The extant literature has shown that there is a significant and positive effect of general strategy on firm performance (e.g. Thune and House, 1970; Greenley, 1994; Grant, 2003; Dess et al., 2010; Parnell, Lester, Long, & Köseoglu, 2012). However, the prior literature showed that despite the presumed positive association between strategic planning and company performance in the prescriptive literature, Boyd (1991) notes that after decades of research, the effect of strategic planning on a firm's performance is still unclear. In the time since this study numerous papers conducting similar analyses have been published resulting in dozens of empirical tests of the strategic planning-performance relationship. Some studies have reported strong benefits of general strategy (Karger and Malik, 1975; Rhyne, 1986), many report no quantifiable benefits (Grinyer and Norburn, 1975; Kudla, 1980), and others (Fulmer and Rue, 1974; Whitehead and Gup, 1985) have even reported that strategy planners perform worse on some measures than their non-planning counterparts.

Grant (2003, p. 492) notes that empirical research in strategic planning systems has focused on two areas: the impact of strategic planning on firm performance and the role of strategic planning in strategic decision making. The first empirical test in the relationship of general strategy and firm performance was conducted by Thune and House (1970), who reported better economic performance by groups of formal strategic planners as compared to non-planners. In addition, the

prescriptive general strategic management literature implies that there is a positive association between strategic planning and company performance (Greenley, 1994). Capon et al. (1994) argue that the greater the degree of sophistication of the strategy planning process, the better the performance of the organization. In their view, strategic planners should perform better than financial planners because of their focus on adaptation to the environment, and the formal thinking through of strategic issues and resource allocation priorities. This practice should lead to the better identification of opportunities and threats, and appropriate firm action.

Moreover, in their study Glaister, Dincer, Tatoglu, Demirbag and Zaim (2008, p.365), showed that “a strong and positive relationship was formed between formal strategic planning and firm performance, which tends to confirm the arguments of the prescriptive strategic management literature”. Similarly, (Dess et al., 2010) conducted a survey and highlighted several key advantages of implementing strategic planning practices within the organization. At first, barriers to mobility that protect one group from attack by another can be readily identified. Second, it identifies groups with marginal competitive positions. Third, firms can utilize the research to assist in future planning. Finally, strategic group research aids in analysing industry trends. In addition Parnell, Lester, Long and Köseoglu (2012) conducted a study in the context of Chinese small and medium enterprise (SMEs) in order to analyse and investigate the impact of general strategy on firm performance. They reported significant and positive effects between general strategy and the performance of SME firms. This discussion leads to the following hypothesis.

H2: There is a significant positive impact of general strategy on firm performance

In a corporate context, foresight activities have been employed to make better long-term decisions (Durand, 2003; Havas, 2003), support innovation activities (Grupp, 1999) and strategic planning by identifying alternative trajectories (Arrow, 1962) for emerging technology (OECD, 1998) trends and creating future scenarios (Lipsey, 1998). As a result, we now have a rich body of knowledge of methods that can be used to address specific management challenges. Forecasting techniques attempt to reduce uncertainty and project estimates of future outcomes, scenario planning attempts to uncover and exploit uncertainties within the strategic environment as a tool for learning and awareness-building (Raford, 2015).

Strategic foresight enhanced the firm's performance in different ways. For example, it explored future opportunities so as to set priorities for investment in science and innovation activities, reorienting the firm's science and innovation system, demonstrating the vitality of the science and innovation system, bringing new actors into the strategic debate, building new networks and linkages across fields, sectors and markets or around problems, (Georghiou & Keenan, 2006). Similarly, the foresight process involves "intense iterative periods of open reflection, networking, consultation and discussion, leading to the joint refining of future visions and the common ownership of strategies, with the aim of exploiting long term opportunities opened up through the impact of science, technology and innovation on society" (Harper, 2003, p.765). This discussion leads to the following hypotheses.

H2a: There is a significant positive impact of forecasting on firm performance

In order to ensure long-term competitive advantage, companies need to develop the strategies to cope with current business needs, and search, plan and develop new business areas. Developing the right approach requires taking into account the challenges, which include (i) the need to integrate multiple approaches (ii) ensuring the participation of key stakeholders and decision makers (iii). Operating under the conditions of environmental uncertainty (iv) taking into account the relationship between the factors affecting the organization - for example the market, technological, social, legal, and economic factors (Heger and Rohrbeck, 2012). Moreover, foresight, which is a platform ensuring the participation of the most important stakeholders and decision-makers has a positive impact on the perceived quality of the decision making process in firms (Ejdys, 2013). This discussion leads to the following hypotheses.

H2b: There is a significant positive impact of participation on firm performance

H2c: There is a significant positive impact of observation on firm performance

General strategy played an important role to evaluate and monitor the firm's financial performance. Accordingly, it is argued by Turker (2009) that while economic responsibility should be distinguished from other responsibilities, they should be considered together in addressing CSR because financial interests are the fundamental reason for establishing a business, and corporate ethical behaviors, which are something beyond mere financial issues, are the main factor influencing an organization's survival (Nejati and Ghasemi, 2012). Moreover, the organization needs to develop such a strategy that may consider different organizational concerns including competitive advantages, reputation and customer satisfaction (Saeidi, Sofian, Saeidi, Saeidi and Saaeidi, 2015). For

example, Helm (2007, p.24) claimed that a company with a good reputation is perceived to be 'less risky than companies with equivalent financial performance, but with a less well-established reputation'. From the view point of financial advantage, Kotha, Rindova, and Rothaermel (2001) and Roberts and Dowling (2002) found that firms with higher reputation enjoy higher sales growth and higher return on assets (ROA).

This discussion leads to the following hypothesis.

H3: There is a significant positive impact of general strategy on financial performance (Net profit, gross profit, and others).

2.11 Strategic Foresight and Company Performance

Strategic foresight has been argued to be a means by which corporations functionally benefit in competitive terms (Portaleoni, Marinova, Marinov, & Ul-Haq, 2013). For profit making organizations, the single most important objective is arguably the achievement of sustainable competitive advantage. Research has shown significant impact of the strategy making process in firms attaining superior performance (Aguilar, 1967; Anderson & Paine, 1975; Andrews, 1971; Bourgeois, 1980; Downey, Hellriegel, & Slocum Jr, 1975; Duncan, 1972; Hambrick, 1982; Uytterhoeven, Rosenblum, & Ackerman, 1977).

The idea behind strategic foresight is to be able to foresee and react to the changing environment so that all relevant stakeholders do not find greater value elsewhere and the firm itself is able to identify how it can obtain inputs for less cost. The central premise to company performance will be to focus on all stakeholders and create value along a number of dimensions (Freeman, 2010). Strategic foresight relies on focusing on internal stakeholders of a firm to create

core competencies to identify avenues for greater value creation. Value includes taking into account legitimate stakeholders including customers, communities in which the firm operates, suppliers of capital, equipment, materials, and labour (Phillips, Freeman, & Wicks, 2003).

Producing strategic foresight is intended to allow firms to innovate and renew themselves, to understand and examine environmental disturbances and uncertainties, and prepare for future uncertainties (Ringland, 2010; Rene Rohrbeck et al., 2007; René Rohrbeck & Gemünden, 2008; Said & Hellara, 2013). Thus strategic foresight is intended to enhance a firm's value by increasing its capacity to perceive change and to interpret, understand and respond to it, by influencing other actors, and increasing capacity for organizational learning (René Rohrbeck & Gemünden, 2008; Said & Hellara, 2013).

This study argues that strategic foresight has a positive impact on the firm's performance as measured through different indicators namely profits, sales volume, market share, tax return on assets and sales, and overall performance. Strategic foresight allows a firm to successfully navigate complex, uncertain and volatile environments, allowing a firm to enhance their capability and thus their competitive advantage (Amniattalab & Ansari, 2016). Strategic foresight increases company performance by assisting in making scientifically grounded investment decisions by helping in identification of priority sectors of the firm. It also allows for establishing and maintaining relationships with relevant external actors and better positioning within the domestic and international market for its customers (Vishnevskiy, Karasev, & Meissner, 2015). Thus, strategic foresight enhances increased performance through not only facilitating the identification of alternative visions of the future, but also through fostering the process of 'planned learning' about the future, by enabling the organization to be ready to

adapt to changing situations as they develop (Vishnevskiy, Meissner, & Karasev 2015; Vecchiato 2012).

Strategic foresight can retain company performance in a turbulent environment by ensuring unity of the firm's organisational system, preventing problems arising out of a fast-moving firm, with its quick growth, to adversely affect its performance (Costanzo, 2004). Successful implementation of strategic foresight processes can provide a firm increased perception, increased ability to interpret change, and an increased ability to respond to change and greater capacity for organizational learning and influencing others leading to better performance (René Rohrbeck & Schwarz, 2013). Strategic foresight can also improve company performance by assisting in the assessment of a new business field, by providing insights on drivers, barriers, showstoppers, and provide recommendations on how to enter a new market (Heger & Rohrbeck, 2012).

This discussion leads to the following hypotheses.

H4: There is a significant positive impact of strategic foresight on firm performance.

Apart from the direct impact of strategic foresight on organizational performance, the study also takes account of internationalization effects by evaluating the moderating role of international competitors and sales revenue from international sales between strategic foresight and organizational performance. The theory of strategic foresight (Courtney, 2001; Fink, Marr, Siebe, & Kuhle, 2005; Makridakis 1990; Schoemaker, 2012) and internationalization (Clark, Li, & Shepherd, 2017) contends that strategic foresight and the understanding of international competitors increases the ability of firms to scan competitors' strategies and hence develop plans and strategies considering the

international competitors and markets. Thereby, ultimately contributing to organizational performance. This detailed understanding of international competitors and their practices would enable firms to adapt accordingly. This would subsequently provide competitive advantage to the organizations and ultimately lead towards improved organizational performance (Akhtar, Khan, & Mujtaba, 2013). In the same way, strategic foresight should enable organizations to glean information about competitors' strategies and practices and design their products accordingly to compete in the market, again, leading to improved organizational performance (Koontz, 2010; Thompson & Strickland, 2001).

Burgel and Murray (2000) argued that when new resource constrained start up organizations enter international markets, the strategic decisions related to their competitors have major importance. In addition: Krist (2009); Bausch, and Krist (2007); and Beal (2000) investigated context related moderators and identified internationalization as a strategic option. Krist (2009) in a meta-analysis highlighted that many studies have considered international sales as an important dimension of internationalization which is correlated with sound organizational performance. Chakrabarty and Wang (2013) also found internationalization to be an important factor and found it had a positive effect on sales. Cadogan, Kuivalainen and Sundqvist (2009) noted that success should become greater in magnitude as the degree of internationalization increases. Additionally, Bausch and Krist (2007) referred to internationalization as a strategic option for success. Hence, this study provides a focus on the moderating role of international sales.

Based on this discussion, the following hypotheses are proposed:

H4a: *The number of international competitors positively moderates the relationship between strategic foresight and organizational performance, i.e. the*

greater the number of international competitors the stronger will be the relationship between strategic foresight and organizational performance.

H4b: The level of international sales positively moderates the relationship between strategic foresight and organizational performance, i.e. the greater the level of international sales the stronger will be the relationship between strategic foresight and organizational performance.

Based on the aforementioned literature, the study also assess the impact of strategic foresight on firm financial performance. Hence, the following hypotheses is proposed

H5: There is a significant positive impact of strategic foresight on financial performance (Objective measures of Performance including Net profit, gross profit, and others)

2.12 Management Techniques and Company Performance

Today, project management practices play a key role in different industries and sectors. Project management is promoted as an organizational strategic component that leads innovation, creates value and turns vision into reality (Rajablu, Marthandan and Yusoff, 2014). The role of different project management techniques to implement projects successfully has been widely established in areas such as the planning and control of time, cost and quality (Munns and Bjeirmi, 1996). The extant literature has grouped management techniques into different categories. For instance, in their study Sarpong and Maclean (2014) categorized (1) intuitive logic, (2) trend and cross impact analysis,

(3) competitive intelligence as management techniques. The prior research demonstrates that organizations use a wide range of different tools and techniques (Rigby and Bilodeau, 2011; Stenfors et al., 2007) integrated into higher-level management practices. The practice of management accounting, for example, includes methods such as activity-based costing or balanced scorecards, each implemented following a set of specific procedures (Chenhall and Langfield-Smith, 1998). Similarly, a corporate level management practice such as planning would involve methods that include environmental scanning, SWOT (strengths, weaknesses, opportunities, and threats) analysis, or strategy mapping (Richards, Yeoh, Chong and Popovic, 2019).

Management techniques have been recognized as an important indicator of organisational performance (Ibbs and Kwak, 2000; Andersen and Vaagaasar, 2009; Eskerod and Riis, 2009; Mengel, Cowan-Sahadath, and Follert, 2009; Kerzner, 2015; Richards, Yeoh, Chong and Popovic, 2019). However how to accurately measure organisational performance has been a long-standing question facing scholars. The concentration on techniques may be considered as the 'hard' issues in project management. They are the easily measured and quantified concepts of time and cost (Munns and Bjeirmi, 1996). Katou and Budhwar (2006) summarised previous research and categorised organisational performance indicators into six indices: effectiveness (in meeting organisational objectives), efficiency (in using the least resources to meet objectives), development (of organisational capacity to meet future opportunities and challenges), satisfaction (of all stakeholders), innovation (for products and processes) and quality (percentage of high-quality products). They also argued

that achieving these performance goals will help organisations increase their profitability.

Scholars have cited “the ignorance or poor stakeholder management” as one of the key reasons responsible for project failure (Aaltonen, 2011; Chang, Chih, Chew and Pisarski, 2013; Hietbrink, Hartmann and Dewulf, 2012). Findings indicate that issues within the stakeholder environment are mainly related to the stakeholder influential attributes and behaviours and their understanding and management (Beringer, Jonas and Kock, 2013; Fageha and Aibinu, 2013), which require exhaustive analysis, broader knowledge, and inclusive management methodology, techniques and tools in order to effectively be assessed, utilized and managed to ensure project well-being and success.

Richards, Yeoh, Chong and Popovic (2019) stated that business intelligence (BI) and business analytics (BA) are management techniques which contribute to corporate management practices in order to enhance firm performance. Similarly, according to Kerzner (2015), the use of the best project management tools and techniques leads to added business value, greater benefit realization, and better benefit management activities. In addition, several authors have shown that project management delivers several tangible and intangible benefits to organizations, for example, tangible benefits, such as better financial ratio of return on investment (Ibbs and Kwak, 2000), and intangible benefits, such as corporate culture, organization efficiency, and client satisfaction (Andersen and Vaagaasar, 2009; Eskerod and Riis, 2009; Mengel, Cowan-Sahadath, and Follert, 2009).

This discussion leads to the following hypothesis.

H6: *There is a significant positive impact of management techniques on firm performance*

2.13 The Effect of Management Practices on Company Performance

Prior literature has shown that there are significant differences in firm performance within a country and between countries, within a sector and across sectors (Bloom, et al., 2012; Bloom, et al., 2016; Davila, Foster, & Jia, 2010; Syverson, 2004, 2011). Prior literature shows that even within countries scoring highest in management practices leading to good performance, for example, the US which has the best score in management practices (Bloom, et al., 2012), performance varies greatly between firms (Syverson, 2004). Across countries there are huge differences between firm performance and productivity (Lengnick-Hall et al., 2009) (emphasizing on India and China). Prior studies show that differences in management practices appear to be strongly associated with difference in performance and productivity across firms and countries (Black & Lynch, 2001; Bloom, et al., 2012; Ichniowski, Shaw, & Prennushi, 1997). Winter (2003) found that differences in corporate practices by managers were related to difference in corporate performance. Ichniowski et al. (1997) found that managerial practices related to adaptation of clusters of complementary human resource management (HRM) practices have large effects on productivity. Black & Lynch (2001) found that workplace practices, information technology and human capital investments can have an effect on firms' performance and productivity. However, such a positive effect on productivity is not simply based on adoption of workplace practices and human resource systems, but importantly on how such practices and systems are implemented.

Thus, there is a growing literature on how management practices are an important factor on variations in productivity across firms and countries (for a list see Bloom et al., 2011; Bloom et al., 2010; Bloom, et al., 2012). Various management practices can be adopted by firms, however, before explaining in detail such management practices, a caveat is in order. Although management practices are important and studying them and implementing them may provide benefit, ‘context matters’, in fact it can have one of the most significant influences on the effectiveness of management practices (Khanna, 2014; Khanna, 2015). If a particular management practice has been successful in one country, it does not follow that it would have the same effect in another country, this is because lessons learned in one place are not easily transferred to another (Khanna, 2014; Khanna, 2015). It is essential to keep in mind that sometimes a management practice would not just need tweaking in a new environment, but rather radical reworking. When implementing management practices, it is essential to keep in mind the context in which they are being implemented, where there are differences in the context, both internal and external, in which the firm is operating compared to those from where the practice was originally developed this may make implementation problematic (Khanna, 2014; Khanna, 2015).

Routines can play an important role in firm performance (Becker, 2004). Routines enable coordination, this coordination is built on the basis of a balance between interest of the participants in the routine (Becker, 2004). Similarly, routines also bring a degree of stability of behaviour since they can engender implications about the behaviour of others. However, this stability is a relative term, and includes the potential for change due to the inherent qualities present due to the agency of the participants to the routine. Routines also allow for

economising on the limited cognitive resources since part of the routines can often be executed in the realm of the subconscious. Routines also bind knowledge, including tacit knowledge. Thus routines play a fundamental role in building organisational capabilities (Becker, 2004).

Prior research has also shown how human resource management practices can have a significant impact on firm performance. (Becker et al., 1998; Lengnick-Hall et al., 2009). An important area of management practice deals with talent management. Talent management has been defined in various ways (Collings & Mellahi, 2009; Ariss et. al., 2014). At its core talent management is concerned with developing a talent pool of high performing and high potential individuals, while ensuring their continued commitment to the organisation, to fill key positions in an organisation (Collings & Mellahi, 2009; Ariss et. al., 2014; Nijs et. al., 2014; Meyers & Woerkom, 2014). Effective talent management by decision makers looks not only at a single talent domain, and not just employees in leadership positions, but rather assesses which domain(s) would be most useful for the organisation and focuses on employees at all levels, to implement specific tools and procedure to increase talent effectiveness (Nijs, Gallardo-Gallardo, Dries, & Sels, 2014). For example, Indian organisations generally consider talent management to mean use of “effective mechanisms to recruit, identify, develop, manage and retain key personnel” (Cooke, Saini, & Wang, 2014). The key management practices identified include financial incentives, training and development, performance management, recognition and award giving for exceptional performance, setting role models, improving working conditions, effective and transparent communication, employee involvement and welcoming suggestions in decision making (Cooke et al., 2014).

Bloom et al. (2013) also found that adoption of good management practices increases productivity, increases decentralization in decision making due to better flow of information, and greater use of information technology, to increase data collection and analysis. The reason for the lack of adoption of such practices was linked to information barriers. Bloom et al. (2013) found that adopting these management practices had three main effects. First, it raised average productivity by 11 per cent through improved quality and efficiency and reduced inventory. Second, it increased decentralization of decision making, as better information flow enabled owners to delegate more decisions to middle managers. Third, it increased the use of computers, necessitated by the data collection and analysis involved in modern management.

Research on management practices has consistently shown that firms scoring highly in management practices also have better performance than their counterparts, both within a country and across countries, for example, Bloom, et al. (2016) for Pakistan; Bloom et al (2016) for the US as compared to other countries, Bloom,, et al. (2012) for various countries, Bloom et al. (2011) for India, Bloom et al. (2010) for firms in the UK, and how firms scoring high on management practices are not only more productive but also more energy efficient, leaving a smaller carbon footprint. The purpose of this thesis is not to argue whether one set of management practices is better than another. Rather, it examines the link between various management practices and performance. Based on this discussion it is proposed that:

H7: There is a significant positive impact of management practices on firm performance.

Family businesses are known for their vulnerability to decline and death (Poza, Alfred, & Maheshwari, 1997), and hence, Sirmon and Hitt (2003) have called for family business firms to manage resources effectively to compete in today's dynamic markets. Prior research has shown the lack of professionalism in many family firms. There are limits to the quality and quantity of human capital in family firms. Dunn et al, (1995) found that the goal of employing family members could lead to hiring suboptimal employees. Furthermore, family firms frequently have trouble attracting and retaining highly qualified managers (Sirmon & Hitt, 2003).

Qualified managers may avoid family firms due to the exclusive succession, limited potential for professional growth, and lack of perceived professionalism (Sirmon & Hitt, 2003). Bloom, Sadun, & Van Reenen (2015) found that private equity owned firms are typically well managed. They have significantly better management practices than almost all other ownership groups such as family-run, founder owned, or government owned firms. Sánchez-Marín, Meroño-Cerdán and Carrasco-Hernández (2017) in their study of 500 Spanish companies, found in non-family firms, a higher degree of formalization (having a set of rules and procedures) has a positive influence on firm performance, confirming the negative influence of family involvement on the relationship between formalization and the firm performance. Memili, Fang, Koç, Yildirim-Öktem, and Sonmez (2018) in their study of the adoption of organizational practice, found that family ownership negatively influences the adoption of sustainability practices. Bloom and Van Reenen (2007) in their study found that family ownership combined with professional management (i.e., where the CEO is not a family member) has a mildly positive association with good managerial practices. Based on this discussion it is proposed that:

H7a: *The significance of the relationship between the adoption of management practices and firm performance will be higher in companies where the CEO is not a family member.*

2.14 Constraints on Management and Company Performance

A constraint is: “The state, quality, or sense of being restricted to a given course of action or inaction. An applicable restriction or limitation, either internal or external to a project, which will affect the performance of the project or a process” (PMI, 2008, p.421). Today's managers face and deal with constraints far beyond the traditional project-specific triple constraints. Many “project constraints” are rooted outside of project boundaries and hence outside of managers' control, making the evaluation and management of competing demands almost an impossible task (Lee, 2010).

In today's turbulent business environment, the advantage goes to organizations whose leaders are continually scanning the external environment, engaging in organizational dialogue and participating in learning processes in order to discover possibilities, mobilize positive energy and build commitment within their organizations to achieve a shared, robust view (Savage and Sales, 2008).

According to scholars like (Maddaloni and Davis (2017) it is essential to incorporate a better and inclusive stakeholder management approach, which will not only improve the performance of projects but also contribute towards project success. Addition to this, improving infrastructure spending will enhance project selection and delivery and management of existing assets, which could translate into 40% savings (McKinsey Global Institute, 2016). The management of

megaprojects needs to increase and enhance transparency, fairness and participation by considering and balancing the project's stakeholders' economic, ecologic, and social interests. Project managers need to consider a long-term perspective for ethical and sustainable development which will take into account the global, regional and local stakeholders (Eskerod and Huemann, 2013). Turner and Muller (2013) showed that effective leadership is a critical success factor in the management of organizations, and that an appropriate leadership style can lead to better performance.

Gibbons and Henderson (2013) argue that management practices are a key reason for persistent performance differences across firms due to relational contracts. In their studies Bloom et al. (2019) analysed the correlation of management practices with five alternative measures of firm performance (productivity, profitability, innovation, survival, and growth). Moreover, effective organizational performance could be achieved through better management practices. In this regard, Garvare and Johansson (2010) stated that in order to strengthen organizational sustainability, managers need to endlessly satisfy or exceed the demands of stakeholders in such a way that (i) organizational delivery, that is the quality of output to stakeholders, increases; or (ii) stakeholder demands on the organization decrease, thereby reducing the constraints.

Lee (2010) suggested a new constraints management triangle for project managers which consists on (i) resource elements including people, systems and tools, (ii) financial elements including revenue, expense, budget, allocation and (iii) stakeholder elements including sponsor, client, and customer. The integration of these management constraints into routine project management practices helps project managers to successful completion of their projects (Lee, 2010).

Hence, the project managers and team members should continue coordination between them and stay up to date with industry best practices in order to improve the firm's performance.

This discussion leads to the following hypothesis.

H8: There is a significant impact of constraints on management on firm performance

2.15 Business Environment and General Strategy

Business environment has been recognized as one of the contingency factors in strategic management research as the universal relevance of competitive strategies has been replaced by a contingency view in determining the effectiveness of the strategies (Hambrick and Lei, 1985; Venkatraman and Prescott, 1990). For example, Miller (1988) in examining the contingency view of Porter's generic strategies suggested that differentiation strategies would fit better to dynamic or growing environments while cost leadership strategies would be more suitable for mature or stable environments. Prajogo (2016) assessed the role of business environment as a contingency factor by applying contingency theory of organizations as the theoretical lens (Donaldson, 2001) which suggests that firms' strategies or capabilities must be aligned with the characteristics of the environment in which they operate in order to deliver competitive advantage (Donaldson, 2001; Powell, 1992).

Changing business environments alter the way organizations fundamentally conduct business. The area of strategy has always been characterized by the different nature of approaches based on seemingly exclusive fundamental theories. In their article Pretorius and Maritz (2011) stated that strategy should reflect demands of the organizational environments and as such be shaped by

business realities. Rumelt (2011) indicated that when united with a good strategy, dynamic capabilities support the firm to develop the right products and pursue the right markets, and to respond to customer demands and the technological opportunities of the future. Moreover, strategy for organizations in a fast changing and challenging world should be dynamic and does not necessarily look like academic theories statically propose (Pretorius and Maritz, 2011). The analysis of the likely evolution of the business environment has been for a long time a relevant issue in the literature on strategy (Vecchiato and Roveda, 2010).

According to Eruemegbe (2015) business environment is used to mean anything, which surrounds the business organization. It affects the decisions, strategies, process and performance of the business. In addition, he further stated that the environment consists of factors which are beyond the control of the business: social, technological, economical, legal and political. It provides opportunities or poses threats to the organization (Eruemegbe, 2015).

Business environment has a significant and positive impact on the firm's general strategy. This has been reflected in past studies. For example Pretorius and Maritz (2011, p. 30) emphasized the importance of business environment in such a way that "the more stable the environment the more strategy making will lean towards the deliberate approach. In fact, emergent strategy making develops in response to this environmental change. The environment referred to can include elements such as industry maturity, speed of change, stability of technology and information availability". In addition, literature on RBV also supports the contingency theory and suggests that the effectiveness of firms' strategies and capabilities is influenced by the characteristics of industries and markets where the firms operate (Priem and Butler, 2001).

Firms in stable environments should experience less need to change their goal structures to remain successful (Carbonara and Caiazza, 2010). Rational decision-making is most effective if firms can clearly predict the effects and best responses to underlying general environmental conditions under which they will perform. When firms are not able to predict the effects of economic events in the general environment, their decision-making abilities cannot be based on a rational process (Carbonara and Caiazza, 2010). This supports the proposition of Miles and Russell (1995) who argued that the alignment between business orientation, corporate strategy and business environment can provide a source of competitive advantage. The opportunity to systematically examine the organisation's external and internal environment means the mental models and existing assumptions of organizational decision makers are challenged and they end up gaining an improved understanding of the structure of key forces driving change in their business environment (Chermack, 2004; Tamas, 2011).

This discussion leads to the following hypothesis.

H9: There is a significant impact of government and environment on general strategy

2.16 Business and Environment and Strategic Foresight

Strategic foresight comprises the activities and processes that assist decision makers in the task of defining the company's future course of action (Vecchiato, 2012). The topic of foresight has been attracted considerable research during the past decade (Constanzo and MacKay, 2010), and a growing body of evidence suggest that strategic foresight promotes the enactment of organizationally useful actions and repertoires that enhances learning and the entrepreneurial

capabilities of firms embedded in high-velocity environments (e.g. Ahuja, Coff and Lee, 2005; Liebl and Schwarz, 2010; Vecchiano, 2012).

The extant literature has shown that business environment significantly effects the firms strategic foresight (Glaister et al. 2008; Parnell, Lester, Long and Koseoglu, 2012; D'Souza and Kemelgor, 2008). Parnell et al. (2012) stated that small and medium enterprise (SME) managers must interpret the external business environment before they can develop and select an appropriate strategy. D'Souza and Kemelgor (2008) noted that entrepreneurs – whether serial or novice – utilize a close network of contacts for securing market and external environment advice. Glaister et al. (2008) found a strong correlation between formal strategic planning levels in large organizations and firm performance. They further argued that factors such as environmental turbulence, organizational structure, and firm size influenced firms' strategic foresight.

Moreover, the most common process for understanding environments is through environmental scanning (Diftenbach, 1983), gathering and analysing information and trends taking place outside the firm. Managers discover low levels of uncertainty in simple, stable environments, however, uncertainty is high in environments that are complex, unstable, and lacking high-quality information (Duncan, 1972).

Murillo-Luna, Garcés-Ayerbe, and Rivera-Torres (2007) empirically identify the following five possible external barriers which effect firms strategic performance: the high opportunity cost of environmental investment; limited infrastructure services; the rigidity of legislation and bureaucratic complexity; lack of knowledge or difficulty understanding the legislation; and troubles derived from the competitive pressure.

Government and law enforcing agencies can play an important role in the development of a firm's strategic foresight. For example, Parnell et al. (2012) argued that the Turkish government introduced a number of incentives for firms to improve global competitiveness. These incentives decrease the costs of investments both inside and outside the country, and foster research and development efforts (Parnell et al., 2012). Indeed, one could argue that the government is playing a key role in supporting both low cost and innovation foresight strategies (Gurpinar and Barca, 2007).

Previous studies highlighted the impact of the business environment on business strategy and strategic foresight of the firm. For example, Christmann (2000) indicates firms will be able to achieve greater environmental improvements because they can make more efficient use of their internal experience and obtain constant improvements in strategic foresight that enhance their organizational efficiency. Similarly, Judge and Elenkov (2005) find empirical support for the hypothesis according to which the level of integration of environmental issues into the process of strategic planning and the availability of resources correlate positively with one another.

This discussion leads to the following hypotheses.

H10: There is a significant impact of government and environment on strategic foresight

H10a: There is a significant impact of government actions on strategic foresight

H10b: There is a significant impact of investment environment on strategic foresight

H10c: There is a significant impact of business environment on strategic foresight

2.17 Constraints on Management and Strategic Foresight

The discipline of firms' strategic foresight is largely concerned with organizations' ability to explore and exploit opportunities beyond their immediate value network or domain of existing operations (Paliokaite and Pacesa; 2014). Foresight has therefore been recognized as strategic practice that can lead to organizational transformation and renewal (Roubelat, 2006). Moreover, firms need to explore new options in order to be ready for future changes in the environment and to ensure long-term survival (Paliokaite and Pacesa; 2014). In this regard, management practices could play a leading role in developing and enhancing the firm's strategic foresight (Bloom et al., 2019; Paliokaite and Pacesa; 2014).

There are compelling theoretical reasons to expect that management matters for performance/strategic foresight. Gibbons and Henderson (2013) argue that management practices are a key reason for persistent performance differences across firms due to relational contracts. In their studies Bloom et al. (2019) analysed the correlation of management practices with five alternative measures of performance (productivity, profitability, innovation, survival, and growth). In addition, as suggested by the seminal work of Ichniowski, Shaw, and Prennushi (1997), a key correlate of plant level productivity is the adoption of advanced management practices, including employee monitoring, financial incentives, and modern inventory control and workflow techniques. Bloom, Sadun, and Van Reenen (2016) construct an index of advanced practices that they interpret as "managerial capital" and argue that these practices were utilized in different environmental contexts. At the very micro level, Bloom et al. (2013) find a large

causal role for such management practices in a field experiment with Indian textile plants.

Bender and Bundesbank (2018) argued that some management practices can directly affect productivity, many others, like monitoring, goal setting, and use of incentives are mediated through employee decision-making and effort. Moreover, if advanced management practices are complementary with higher-ability employees, as seems plausible, then one would expect firms that use these practices to systematically alter both the skill composition of their workforce and the structure of their pay system, potentially leading to a rise in differential sorting of higher- and lower-skilled workers to more and less productive workplaces (Bender and Bundesbank, 2018).

Constraints on management could hinder these significant effects of management practices on firms' strategic foresight activities. For instance, Day and Schoemaker (2005) argued for a state that they call 'neurotic', which occurs when a firm that has peripheral vision capabilities that exceed its needs. Burt et al. (DATE) and further cited by Rohrbeck and Etingue (2017) argued that foresight may trigger a condition in top management teams that they call 'managerial hyperopia', i.e., being too focused on managing distant futures, while failing to attach sufficient attention to what is close at hand. To overcome these constraints / issues Csaszar and Laureiro-Martínez (2018) suggested that a firm can improve its foresight by employing managers whose mental representations are broad and accurate and by leveraging the ability of groups to make better strategic decisions. To overcome constraints on management corporate managers should plan for the future in order to be ahead of threats and be aware of opportunities for growth (Amniattalab and Ansari, 2016). In addition, managers

also should learn to evaluate costs but consider returns as well. By considering the cost of missing out on new product opportunities or early warnings of upcoming threats, managers can perceive the importance of foresight. As a result, it would be better to consider an additional cost for foresight projects as a part of the R&D expenditure (Amniattalab and Ansari, 2016).

This discussion leads to the following hypotheses.

H11: There is a significant impact of constraints on management on strategic foresight.

2.18. Summary

The summary of the important concepts is shown in the given table.

Concepts	Descriptions	References
Strategy	Strategy has been understood as the long-term coordination required to provide a company structure, direction, and focus, identifying long-term organizational goals and adopting a course of action and allocating resources necessary for achieving said goals.	(Ansoff,1967; Bracker, 1980; Kaivo-oja,2017;Sollosy, 2013)
Foresight	“It is quintessentially a directed process which broadens the boundaries of perception through careful scanning of Possible futures and the clarification of emerging situations” (Slaughter, 1996, pp. 156-163). "A reflection to enlighten the present action in the light of the possible future"	(Godet,1991; Slaughter, 1996)
	(Godet, 1991, p. 10).	
Strategic Foresight	Strategic foresight is “a set of strategic tools that support decisions with adequate lead time for preparation and strategic response” (Calof & Smith, 2010; Ho & O'Sullivan, 2017; Kim, 2012)	(Calof & Smith, 2010; Ho & O'Sullivan, 2017; Kim, 2012)
Management	Management is the process of “getting things done effectively through people” (Ng, 2011, p. 1). Management practices are seen as important	(Ng, 2011; Mol &

Practices	drivers for improvements in productivity (Mol & Birkinshaw, 2009).	Birkinshaw, 2009)
Firm/Company Performance	Central to the idea of company performance is the idea of value (Harrison & Wicks, 2013). In markets, consumers will choose that which will provide them the most value for what value they exchange for it (McFadden, 2006). Measuring performance would Mean quantifying the efficiency and/or effectiveness of action over a certain metric (Melnyk, Bititci, Platts, Tobias, & Andersen, 2014).	(Harrison & Wicks, 2013; McFadden, 2006; Melnyk, Bititci, Platts, Tobias, & Andersen, 2014)
Constraints on Management	A constraint is: “The state, quality, or sense of being restricted to a given course of action or inaction. An applicable restriction or limitation, either internal or External to a project, which will affect the performance of the project or a process” (PMI, 2008, p.421).	(PMI, 2008, p.421)
Business Environment	According to Eruemegbe (2015) business environment is used to mean anything, which surrounds the business organization. It affects the decisions, strategies, process and performance of the business. In addition, he further stated that the environment consists of factors which are beyond the control of the business: social, technological, economical, legal and political. It provides opportunities or poses threats to the organization (Eruemegbe, 2015).	(Eruemegbe, 2015)

CHAPTER 3

Pakistan Textile Industry

3.1 Overview of Pakistan Textile Industry

This section focuses on Pakistan's textile industry and its current competitiveness against regional and global textile manufacturers.

Since the 1960s the world textile trade has been subject to the consequences of the relaxation of trade restrictions in the form of quotas. In 1994 world clothing exports totalled \$158 billion when the ten-year quota elimination process started. By the time the said ten year process ended in 2005, and textile exports were no longer subject to quotas, exports were valued at \$276 billion (though China had to abide by certain quota restrictions under MOUs signed with the EU and US until 2008) (Tsang & Au, 2008).

For Pakistan, textiles are considered the single most important sector of the economy (see the recent Pakistan Economic Survey of the year 2018-19, http://finance.gov.pk/survey_1819.html). Cotton remains the second most planted crop in Pakistan, has a 0.8% share in the GDP, and remains the second most valuable crop in the country amounting to 4.5% of the value of the agriculture sector (including crops, livestock and fisheries.). Similarly the textile sector accounts for nearly one-fourth of industrial value addition, employs about 40% of the total industrial labour force, and accounts for about 59% of total exports (Pakistan Economic Survey 2018-19: http://finance.gov.pk/survey_1819.html).

Despite its importance the textile sector has lagged behind the growth observed in its regional competitors. Tables 3.2 and 3.3 show that compared to Bangladesh, India and China, Pakistan's growth in textile exports has been quite poor. Comparing the last five years, Pakistan has experienced decreases in cotton production, not only has the area in cultivation gone down, but the total bales produced have gone down from 13.96 million bales in 2014-13 to 9.861 million in 2018-19 as per the recent Pakistan Economic Survey in 2018-19: http://finance.gov.pk/survey_1819.html). The same is the case with exports of textiles. As can be observed from Tables 3.1-3.4, Pakistan textiles (including raw cotton and yarn) exports for 2018-2019 stood at \$13.329 billion, which showed a decrease of 1.42% over the 2017-2018 period when they totalled \$13.52 billion. The slow growth, compared to other regional producers, is not a new phenomenon. So, for instance in 2012 Pakistan's textile exports stood at \$12.919 billion, which though had doubled since 2004-2005 when they stood at \$6.125 billion (the last year of quota restrictions) and slightly more than doubled since 1990 when they stood at \$2.663 billion, remained well below the growth experienced by Bangladesh, India and China. Since 2012 the growth experienced by Pakistan textiles export has further slowed. Tables 3.1-3.4 illustrate Pakistan's textile exports are underperforming compared not just to the world but to its regional partners. Only in textiles does it perform better than one regional competitor, Bangladesh, and even then, its performance in total textile and clothing is far behind Bangladesh, which in 2017 had almost three times the value of exports in these categories compared to Pakistan. Pakistan is severely lacking when compared to other competing countries in the region. The slow pace of growth compared to competitors, and the very slow growth since 2012, all indicate that

there are very serious factors that have hampered growth and are likely to arise from government support and the capabilities of the sector itself.

Table 3. 1: Exports in Textiles, Clothing, Raw Cotton and Yarn of Pakistan in 2017-18 and 2018-19 [July to June]¹

Year July – June	Exports in Billions USD [Textiles, Clothing, Raw Cotton and Yarn]
2016-2017	12.450
2017-2018	13.52
2018-2019	13.329

Table 3. 2: Comparison Textile (exclusive of Raw Cotton, Yarn and Clothing) Exports during Tariff and Non-Tariff Period: Pakistan, China, Indian and Bangladesh²

[Textile Exports in Billions USD]	1990	2004	2012	2015	2016	2017
World	107.839	206.359	299.239	309.231	301.459	317.658
Pakistan	2.662	6.124	8.704	8.232	7.680	7.868
Bangladesh	0.3428	0.596	1.8458	1.625	1.756	1.800
India	2.179	7.405	15.348	17.465	16.360	17.37
China	7.219	33.427	95.499	108.988	104.374	109.884

¹ Source: Statistics available on Trade and Development Authority of Pakistan website: <http://www.tdap.gov.pk/tdap-statistics.php>. Year Book 2016-17, available on Ministry of Commerce, Pakistan, website: <http://www.commerce.gov.pk/wp-content/uploads/2019/09/Year-Book-2016-17.pdf>; <https://fp.brecorder.com/2018/07/20180721392598/>

² [Source: World Trade Organisation (2019), International trade and market access data, http://www.wto.org/english/res_e/statis_e/statis_e.html, <https://data.wto.org/> Accessed on 30th September 2019. Latest figures available on the website are for 2017

Table 3. 3: Clothing Exports: Pakistan, China, Indian and Bangladesh³

[Textile Exports in Billions USD]	1990	2004	2012	2015	2016	2017
World	112.236	264.786	434.615	476.656	468.926	492.951
Bangladesh	0.643	6.295	19.379	26.602	28.668	29.212
China	9.669	61.856	159.753	174.693	159.340	158.463
India	2.529	6.925	13.927	18.374	18.192	18.616
Pakistan	1.013	3.025	4.214	5.023	5.102	5.470

Tables 3.1, 3.2, and 3.3 show that Pakistan has shown persistent growth in textile exports since 1990 during both the tariff and non-tariff periods, albeit a very gradual one, especially compared to other countries in the region and even compared to export growth in textiles and clothing for the entire world. Compared to 2017 Pakistan's exports in textiles and clothing declined by 1.4%. The decline may be due to political uncertainty during the 2017-18 period and general decline in the economic growth of Pakistan, but the persistent failure in performance compared to regional competitors, point to other deep-seated factors as well. This research will consider these factors. Future exports in textiles will determine whether this decline is temporary or not. Pakistan textile exports have not been able to grow at the same rate as the world and other regional countries. This is especially significant because textiles is the single biggest sector in Pakistan's exports (Trade Development Authority of Pakistan, 2014) and as such should ideally be performing better.

³ Source: World Trade Organisation (2019), International trade and market access data, http://www.wto.org/english/res_e/statis_e/statis_e.htm, <https://data.wto.org/> Accessed on 30th, September 2019. Latest figures available on the website are for 2017

Table 3. 4: Raw Textile Material Exports of Pakistan as Percentage of Total Textile Exports⁴

Exports in Billions of USD (July-June)	2012 -2013	2017-2018	2018-2019
Total Textile Exports	12.8 (100%)	13.52 (100%)	13.329 (100%)
Raw Cotton	0.154	0.005	0.251
Cotton Yarn	2.252	1.371	1.125
Yarn Other than Cotton Yarn	0.038	0.033358	0.033862
Total Raw Textile Material Exports	2.444 (19%)	1.4 (10.4%)	1.4 (10.6%)

From Table 3.4 it can be seen that about 19% (or USD 2.444 billion out of USD 12.8 billion) of Pakistan’s textile exports is in raw materials (raw cotton, cotton yarn and yarn other than cotton yarn) in 2012, though this has gone down to around 10% in 2017-18 and 2018-19, it is still a huge portion of the exports. Arguably, this raw material could potentially be utilized within the country to produce and export value added goods. A case in point would be Bangladesh which does not produce raw materials. Therefore, Bangladesh exports are a result of manufacturing value added goods. There is a huge potential for growth within Pakistan without exporting additional raw materials, which is being disregarded. Potentially, this could be a symptom for Pakistan’s decline in competitive growth.

⁴ Source: Trade Development Authority of Pakistan (2014), Export statistics and Trends, <http://www.tdap.gov.pk/tdap-statistics.php>, Accessed on 30th September 2019

From the 1960s, the world textile trade was subject to a special set of trading rules which allowed the use of quotas, a trade restriction tool, by major importing countries to quantitatively limit imports (Dickerson, 1995). However, the quota system was finally removed on January 1, 2005 over a ten-year period according to the Agreement on Textiles and Clothing (ATC) (Ahmad & Diaz, 2008; Lu, 2012; Tahir & Anuar, 2016). This breakthrough was an achievement of the Uruguay Round of multilateral trade negotiations under the auspices of the General Agreement on Tariff and Trade (GATT). GATT went on to become the World Trade Organisation or WTO.

Studies have found that China, Pakistan, Bangladesh and India have been the biggest beneficiaries of the end of quotas, as opposed to some African and Asian countries that experienced a loss of market and negative export growth after the end of the quota system. Generally, however, a majority of countries saw modest export growth (Ahmad & Diaz, 2008; Hassan & Mahmood, 2016; Lu, 2012; Mayer, 2005). Given that Pakistan heavily benefitted from the quota system, the cessation of the system may have had important consequences for future planning trajectories, especially considering that compared to China, Bangladesh and India, Pakistan failed to capitalize on the end of quotas to the degree these countries did, even though textiles are the single most important sector for Pakistan, which is not the case with India or China.

Similarly, in the quota-free environment, it is well known that China is without doubt the leader in the global textile and clothing trade due to its relatively low-cost and increasingly quality-driven manufacturing base. However, developing countries in South and South-East Asia (including India, Indonesia, Thailand, Philippines, Sri Lanka, Pakistan, Malaysia, Singapore, Bangladesh and Vietnam)

are becoming more and more important as can be observed from the fact that their textile exports to the USA have been increasing in recent years (Tsang & Au, 2008). However, compared to its regional competitors, Pakistan has not been able to perform as well, and there remains great potential for growth, which is not being realised.

From the data provided above in Tables 3.1-3.4, it is clear that Pakistan is not totally out of the game since the end of the quota regime. However, the rate of growth has only been small and gradual. This less than impressive growth is further apparent when compared to the rate of growth with Bangladesh and India. This is a major cause for concern in a country that counts textiles as its most important industry in terms of exports and is also ranked the sixth largest global textile producer.

Similarly, the fact that Pakistan exported about \$251 million worth of raw cotton and \$1.125 billion worth of yarn in 2018-2019 points towards a huge unexploited potential in terms of value-added goods. This especially concerning because compared to 2012-13 Pakistan's export of raw cotton has gone up by a hundred million dollars, while the export of semi-finished product, yarn, has gone down. This shows that the textile manufacturing sector in Pakistan is failing to realize its potential (value added goods have also been identified as an opportunity by Hussain, Figueiredo, Tereso, & Ferreira, 2010).

Within Pakistan several factors affect the profitability of business firms. Some of these factors are part of the owner's personality and the strength of personal networks. These characteristics involve education, the owners experience in business and family history/characteristics, motivation, skills, level of education, personal attributes, managerial and technical competences. Research reveals that

education, media-related habits, use of information technology, number of investors, and generations in business have a positive relationship with the health of the firm (Ahmed, 1997; Hankinson, 2000; Javaid Lone, Ali, & Khan, 2016; Bhutta, Rana, & Asad, 2008).

Similarly, financial management also has a role to play in the health of the textile sector. The first issue relates to Working Capital Management (WCM). The concept of Working Capital (WC) includes both Current Assets and Current Liabilities. The main objective of WCM is to ensure the maintenance of satisfactory level of WC in such a way that it is neither inadequate nor excessive. It needs to be not only sufficient to cover the current liabilities but also to ensure a reasonable margin of safety. The optimal sources of working capital in Pakistan are trade credits, bank credit, current provisions and non-bank short term borrowings; and long-term sources, i.e. equity share capital, preference share capital and other long-term borrowings.

Studies on WCM in textile firms in Pakistan are in line with studies on business firms generally, showing a positive relationship between efficient WCM and profitability (Afza & Nazir, 2011; Chhapra & Naqvi, 2010; Palamutcu, 2016; Raheman & Nasr, 2007; Shah & Sana, 2005). In relation to textile firms Chhapra & Naqvi (2010) found that firms efficient in managing their WC obtained a high level of profitability and vice versa.

Investment in technological instruments (Fixed Assets) also affects the profitability of textile companies in Pakistan. The high cost of production has an impact on the profitability of textile companies in Pakistan. There is a negative relationship between debt used by textile companies in Pakistan and profitability. There is a positive relationship between the size of Pakistani textile companies

and their profitability. However, debt has a negative impact on profitability (Chhapra & Naqvi, 2010).

This all points towards a need for the development of financial information systems to develop financial discipline in WCM and financial forecasting; and a need to make planning and control devices more intensive and transparent to enhance the efficiency of cash management. This would require greater development in the financial sector. Thus, Hanif & Jafri (2008) argued that a textile sector with an efficient financial system will improve the textile sector's comparative advantages. This is in line with previous research in the area (Fanelli & Medhora, 2002; Kletzer & Bardhan, 1987). Furthermore, Memon, Bhutto, & Abbas (2012) argued that textile firms in Pakistan are operating under an inefficient capital structure and the poor selection of capital structure adversely affects the financial performance of textile firms. They conclude that textile firms which are large in size are under performing and operating below economies of scale. Moreover, the textile firms possess a high amount of fixed assets which leaves a negative impact on the performance of the firms (Sheikh & Wang, 2010). Such textile firms in Pakistan are poor in terms of their productive and allocative efficiency.

This inefficiency of the textile sector is exacerbated by serious issues such as the severe energy crisis, poor law and order conditions as well as political instability. Furthermore, prevailing conditions make for job cuts and unemployment which firms can exploit for cost cutting purposes. However, this is a causal effect for high employee attrition rates which makes the strategy short term against the desired long-term sustainability of the business.

Additionally, it appears that though there is a positive relationship between short term debt and profitability, long term debt negatively impacts firm performance (Amjed, 2007), this coupled with a need for greater investment in the textile sector to introduce newer and more efficient technology and a shift towards value added products requires that a lot of emphasis be placed on WCM. This lack of investment has decreased competitiveness through increases in costs and inefficiency.

An increasing interest rate, double digit inflation and decreasing value of the Pakistani rupee have all added to the cost of textile production. In 2008-2009 textile exporters had demanded a KIBOR rate at 8%. Although, during 2014 KIBOR stood between 9.96% and 12.22%, the rates dropped in 2015 and stood between 6 to 8 per cent during August 2015, and this trend of rates below 8% continued until June 2018, however since then the rate have risen steeply and stands at slightly more than 13% in September 2019 (State Bank of Pakistan website http://www.sbp.org.pk/ecodata/kibor_index.asp). It has been argued that the high cost of doing business is because of unabated increases in the rate of interest which have amplified the problems of the industry and that record increases in mark-up rates is one of the major cause of defaults in servicing the loans obtained by the industry. This in turn has caused the volume of non-performing loans to reach an alarming situation for the lending companies. The increasing rates since 2018, seem to have a profound effect on textile export growth as seen by the decrease in textile exports for the July-June 2018-19 period compared to the 2017-18 period. This statement can be justified based on the decrease in exports for 2018-19 compared to the previous year, as shown by Table

3.1

The energy crisis has had an alarming impact on the textile sector. In instances where there is not enough electricity available to meet the demand of customers, it becomes necessary to interrupt supply to certain areas. This is called 'load shedding'. It is different from a power outage that could occur for other reasons. Some estimates suggest that these episodes of electricity load-shedding have reduced textile production capacity by 30%. Similarly, a natural gas shortage has also had a negative impact (Junejo & Khoso, 2018; Kiran, 2016)

In Pakistan, the per acre yield of cotton production is now quite low; a situation intensified by poor crop management, pest and virus attacks and ignorance of new farming techniques. The latter is partly due to the persistence of feudal politics in land ownership thus hampering change and progression. In fact as pointed out above there has been a decline of more than 3 million bales in yield of cotton[PakistanEconomicSurvey 2018-19: http://finance.gov.pk/survey_1819.html].

The general lack of R&D in the cotton sector has led to low quality of cotton compared to the rest of the world. Similarly, the method used to pick seed cotton, storage, transportation, and open sky drying of cotton seed all add to impurities contamination and moisture variations leading to deteriorating product quality. Similarly, the ginning industry is using outdated technology and untrained labour, while the yarn sector is producing coarser counts. Additionally, there is limited production of man-made fibres and even this production is not competitive for reasons of inferior quality. Similarly the power loom sector is also facing problems related to power supplies and finance (Hussain, Figueiredo, & Ferreira, 2009; Khan & Khan, 2010, Kiran, 2016).

3.2 A Brief Introduction to Pakistan's Textile Industry

3.2.1 Historical Development

Table 3. 5: Top Cotton Producing Countries in the World⁵

Seed Cotton Production Quantity in Tonnes	2014	2015	2016	2017
1. World (Total)	76,728,014	66,379,652	67,880,733	74,352,809
2. India	18,488,000	16,016,000	17,307,000	18,530,000
3. China	18,534,950	16,830,000	16,029,000	17,148,459
4. United States of America	9,791,640	8,382,808	10,049,990	12,000,000
5. Pakistan	6,817,178	4,871,738	5,256,780	5,700,300
6. Brazil	4,236,763	4,007,326	3,464,103	3,842,872
7. Uzbekistan	3,400,200	3,361,300	3,227,556	2,900,175
8. Turkey	2,350,000	2,050,000	2,100,000	2,450,000
9. Australia	2,136,700	1,274,100	1,518,678	2,150,961

The world cotton production in 2017 was able to recover, after the steep decline in 2015 and 2016, and was almost able to reach the same production levels as in 2014. Almost all top producing countries suffered a decline in production during 2015 and 2016. As far as Pakistan is concerned, its production which hit a high in 2014, has not been able to reach the same level, and is still producing less than a million tonnes in comparison to 2014.

Table 3. 6: World Cotton Exports⁶

Million 480 lb. bales	2013/2014	2014/15	2015/16	2016/17	2017/18	2018/19
United States	10.5	11.2	9.2	14.9	14.5	14.8
Australia	4.9	2.4	2.8	3.7	4.4	4.4
Brazil	2.2	3.9	4.3	2.8	4.2	4.2

⁵ Source: Data from the Food and Agriculture Organization of the United Nations. Available at <http://www.fao.org/>. Last accessed 8/11/2019.

⁶ Source: <https://www.worldatlas.com/articles/top-cotton-producing-countries-in-the-world.html>.

India	9.3	4.2	5.8	4.6	4.2	4.2
Burkina	1.3	1.1	1.3	1.1	1.1	1.1
Greece	1.3	1.2	1.0	1.0	1.1	1.1
Mali	0.9	0.9	1.0	1.1	1.1	1.1
Uzbekistan	2.6	2.3	2.3	1.3	1.2	1.1
Turkmenistan	1.6	1.5	1.3	0.9	0.7	0.7
Benin	0.5	0.5	0.7	0.8	0.7	0.7
Cote d'Ivoire	0.8	0.9	0.8	0.6	0.6	0.6
Tajikistan	0.4	0.5	0.5	0.3	0.5	0.5
Sudan	0.2	0.1	0.1	0.3	0.1	0.5
Rest of World	4.7	4.6	4.1	4.0	3.9	3.9
African Franc Zone	4.1	4.0	4.6	4.3	3.9	3.9
EU-27	1.6	1.6	1.3	1.3	1.4	1.4
World	41.1	35.1	35.1	37.3	38.2	38.

It can be seen in Table 3.6 that Pakistan is not amongst the top exporters of raw cotton. However, it is still exporting a significant amount, and there is significant potential to use the entirety of cotton produced in making finished good.

Table 3. 7: World ten leading cotton seed producing countries (MMT) during year⁷

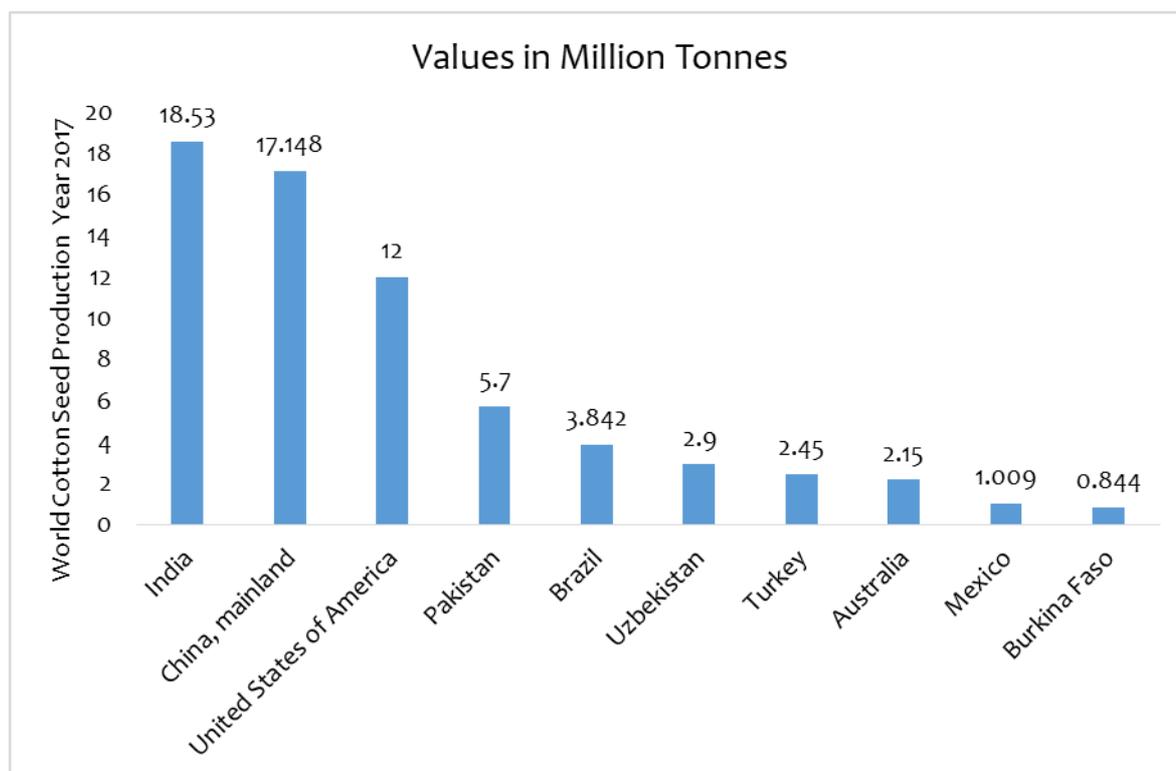


Table 3. 8: Area, Seed Requirements and Seed Availability⁸

Year	Sowing Area (000 Ha)	Total Seed Requirement (Metric Tonne)	Seed Availability (Metric Tonnes)			
			Public	Private	Imported	Total (local and Imported)
2016-17	3,200	40,000	687	28,677	-	29,364
2017-18	3,200	55,328	1,039	26,402	-	27,441
2018-19	3,200	63,232	1,197	55,783	-	56,980

⁷ Source: Food and Agriculture Organization of the United Nations statistics (FAOSTAT) <http://www.fao.org/faostat/en/#data>

⁸ Source: Economic survey 2004-05 statistical appendix pp. 24-25, Economic survey 2010-11. Economic Survey 2018-19

Though Pakistan is amongst the top seed producing countries in the world, Table 3.8 shows that it has been unable to meet its requirements consistently over the years. In spite of there being a decrease over the years in the ratio of seed requirement to available seed, Table 3.8 also shows that there is still a huge difference, more than 6000 tonnes in 2018/19. This shows that there is a need for far greater and more successful planning on part of the both the government and private farmers to ensure that the seed needs are fulfilled.

Table 3. 9: Area, production and average yield of cotton in Pakistan during 1947-2019⁹

Year	Area (million hectares)	Production (million bales)	Av. Lint yield (Kg/ ha)
1947-48	1.24	1.11	362
1949-50	1.11	1.24	452
1959-60	1.34	1.64	494
1969-70	1.76	3.01	326
1979-80	2.08	0.73	350
1989-90	2.59	8.56	560
1999-00	2.98	11.24	641
2009-10	3.1	12.9	707
2014-15	2.96	13.96	802
2015-16	2.902	9.917	582
2016-17	2.489	10.671	730
2017-18	2.700	11.946	753

^{9 9} Source: Economic survey 2004-05 statistical appendix pp. 24-25, Economic survey 2010-11. Economic Survey 2018-19

2018-19	2.373	9.861	707
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Not only has Pakistan seen a reduction in the cultivated area for cotton over the last decade, there has been a steady decline in production as well, except for 2014-15 period when there was a welcome increase in per-hectare yield. The per-hectare yield has fluctuated over the years, and unfortunately stands at the same level as it did a decade ago in 2009-10. Though this is an improvement over the very low yield in 2015-16, it is unfortunate that the yield in 2018-19 dropped to such an extent compared to 2017-18. This again shows that government needs to invest more on planning and research and farmer education to ensure that Pakistani farmers are able to match their yield to at least the high yield achieved in 2014-15.

Table 3. 10: Cotton Yield by Country in KG/HA 2019¹⁰

Rank	Country	Yield KG/HA
1	<u>Israel</u>	1,872
2	<u>China</u>	1,751
3	<u>Brazil</u>	1,686
4	<u>Turkey</u>	1,594
5	<u>Mexico</u>	1,548
6	<u>Australia</u>	1,524
7	<u>Kyrgyzstan</u>	1,331
8	<u>Venezuela</u>	1,234
9	<u>Syrian Arab</u>	1,219

¹⁰ Source: <https://www.indexmundi.com/agriculture/?commodity=cotton&graph=yield>

	<u>Republic</u>	
10	<u>Greece</u>	1,219
11	<u>Bulgaria</u>	1,089
12	<u>Tunisia</u>	1,089
13	<u>South Africa</u>	1,040
14	<u>Peru</u>	1,025
15	<u>Colombia</u>	1,016
16	<u>Spain</u>	1,005
17	<u>United States</u>	940
18	<u>Egypt</u>	762
19	<u>Iran</u>	748
20	<u>Pakistan</u>	697

Despite being amongst the top five cotton producing countries, Pakistan's yield lags far behind other countries, almost three times less than of the top yield country in the world. This again shows the potential for growth in cotton production, using the same amount of land, and points towards a need for the government to invest in research on increasing yield and education of farmers to increase their yield.

The literature on strategic management reveals that environmental uncertainty has turned out to be one of the greatest challenges for modern day organizations, as it has become quite difficult to predict the strategic behaviour of competitors in today's constantly changing and uncertain environments. This may create a situation where the decision maker faces unavailability of appropriate

environmental information for effective and efficient decision making, and may not be able to conceptualize the possible consequences the decision could have (Gurkov, 2010).

The researcher has an interest in further developing an enabler to add to those that already exist in management theory and business philosophy that could help achieve the phenomenon of sustainable competitive advantage. In the context of Pakistan and its textile sector strategic foresight is a significant proactive capability which could be developed by organizations as a higher order competency to identify and address new business and competitive opportunities in an uncertain national, regional and global environment through longer-term strategic foresight-based decision making. Strategic foresight facilitates these organizations in responding to these opportunities and helps them restructure their processes and structures so that they may be able to capture and take full advantage of these new opportunities (Dvir, Segev, & Shenhar, 1993; Tahir & Anuar, 2016; Veliyath & Shortell, 1993). The environmental scanning process in strategic foresight theory provides organizations with a framework for identifying early warnings, developing mental models to respond to these warnings, devising strategies and strategic plans to efficiently address the possible innate complexities in these warnings, and creating sound metrics for monitoring the actions taken (Courtney, 2001; Fink, Marr, Siebe, & Kuhle, 2005; Makridakis, 1990; Schoemaker, 2012; Tahir, Sohail, Qayyam, & Mumtaz, 2016). The proposed research is an attempt to analyse how major organizations in the Pakistan textile industry could strategize to achieve competitiveness, in the face of the aforementioned competitive pressures through strategic foresight processes. The

research further explores whether strategic foresight can make a difference in the competitiveness of the textile organizations in Pakistan.

CHAPTER 4

Research Methods

This chapter describes the research method adopted in this thesis, by identifying its epistemology and theoretical perspective. The thesis is an attempt to analyse how firms in the textile industry in Pakistan strategise to achieve improved performance through strategy, strategic foresight, decision making processes and management practices. The research explores whether a focus on strategy, strategic foresight, and management practices can make a difference in the decision making processes of organizations in the uncertain and turbulent business environments of Pakistan. A comprehensive questionnaire and interviews were used as a research strategy to collect primary data to analyse the role of strategic foresight as a competency. The questionnaire targeted firms in the textile industry in Pakistan and was designed to identify whether strategy, strategic foresight, and management practices acts as a high level competency. This chapter justifies the research strategy used and assesses the quantitative techniques used to analyse the data. The thesis uses empirical data to measure strategy, strategic foresight, and management practices of firms in the Pakistan textile industry.

4.1 Research Perspectives: Epistemology

4.2 Positivism

For this research the positive epistemological framework was chosen. This first step involved coming up with a clear and sufficiently precise definition of terms and concepts labelled as: strategic foresight, management practices, and organisational performance. A basic understanding of these concepts was required before further research could be carried out.

Positivism is concerned with identifying a precise meaning of a social concept, one which is separate from subjective understanding of the actors (Bryman & Bell, 2015; Burrell & Morgan, 1979; Hirschheim, 1985; Johnson & Duberley, 2000). The positivist framework, which advocates an objectivist view of research, presupposes the possibility of a theory neutral observational language, where the only secure foundation of social scientific knowledge is our sensory experience (Johnson & Duberley, 2003). It applies models and methods derived from the natural sciences to the study of human affairs. The objectivist treats the social world as if it were the natural world (Burrell & Morgan, 1979). Advocates of this view argue that it is possible to have an objectively derived research choice and methodology, believing that the researcher is independent of, does not affect and neither is affected by the subject matter of research (Holden & Lynch, 2004). Thus the belief is that the “knowledge of what exists” has an independent existence prior to human cognition and the objective of management researchers is to strive to seek for this particular “objective knowledge”, and that researchers can get closer to this knowledge by daily interactions with the objects of reality (Kamil, 2011). In other words the positivist epistemology posits beliefs, which

emerge from the search of regular actions and causal relationships, and scrutinizes them through empirical testing (Hirschheim, 1985; Holden & Lynch, 2004; René Rohrbeck et al., 2015). The aim is to explain human social behavior by identifying causal explanations and fundamental laws governing human behavior, through data and logic (Davis, 1985; Johnson & Duberley, 2000; René Rohrbeck et al., 2015). This requires that the observer remain divorced from the observed and look at the world objectively, ensuring that theory be tested against 'facts' of the situation thus producing an account corresponding to independent reality (Johnson & Duberley, 2000). Positivism views reality as objective and 'out there' which can be discovered and communicated to others.

The thesis aims at acquiring 'objective knowledge' about the key concepts identified previously: uncertain and turbulent environment, actors, decision making processes, strategic foresight, management practices and firm performance, and uses an objective research methodology to see which concepts can be observed in the Pakistan Textile Industry. There was already an understanding of these terms in the literature. A literature review provided a sufficiently precise meaning of the terms and concepts involved in the research and a positivist framework, which relied on rigorous observation and testing of hypotheses, ensured the existence and application of the identified concepts in Pakistan.

The research involves a comprehensive survey through a questionnaire, and data gathering from direct observation of identified organizations in Pakistan. The positivist framework suited this research in a number of ways: firstly, it could be tested whether strategic foresight and management practices impact

organizational performance; secondly, it could be tested which type of factors are responsible for such performance.

There are however certain shortcomings of the positivist framework. Positivists believe that reality is stable and can be observed and described from an objective viewpoint (Levin, 1988) i.e. without interfering with the phenomena being studied. They contend that phenomena should be isolated and that observations should be repeatable. This often involves manipulation of reality with variations in only a single independent variable so as to identify regularities in, and to form relationships between, some of the constituent elements of the social world. There has, however, been much debate on the issue of whether or not this positivist paradigm is entirely suitable for the social sciences (Hirschheim, 1985), many authors calling for a more pluralistic attitude towards research methodologies (see e.g. Remenyi & Williams (1996); Kuhn (1970) and Bjørn-Andersen (1985)). Thus, the positivist approach often lacks depth providing limited answers; only identifying the *prima facie* causal relationships that exist between the environment the actors inhabit and the processes involved, it usually does not provide any *understanding* of human behavior. Positivist research normally lacks the awareness of the notion that individuals do not exist in isolation, that to fully understand them they need to be understood in the context of their cultural and social life (Hirschheim, 1985). Positivism fails to fully appreciate that social facts do not just exist 'out there', but are themselves a product of socially and historically mediated human consciousness (Berendzen, 2009). A purely positivist approach does not provide answers to the complex human characteristics and how these develop in an environment like Pakistan.

When a research methodology based solely on the positivist framework is used, this vital element could be missed (George Herbert Mead (1880-1949) mentioned in Hirschheim, 1985).

4.3 Deductive Approach

The positivist framework follows a deductive approach. In the deductive approach the theory guides the result (Bryman & Bell, 2015). This research started with a deductive approach. Hypotheses were proposed to assess the relationship of strategic foresight and management practices with organizational performance. The collected data from survey and secondary sources was used to test the hypotheses. A deductive approach follows a quantitative methodology. Quantitative research methodology, following from a positive epistemology, takes social reality as an external objective reality and thus places emphasis on the testing of hypotheses through deduction by collection and analysis of data (Bryman & Bell, 2015).

The goal of quantitative research is to “identify causal explanations and fundamental laws that explain regularities in human social behaviour” (Mark, Richard & Andy, 1991). This is done through development of an hypothesis and using the deductive approach to test the veracity of the hypothesis using generalisation of results from sufficiently large sample size (Holden & Lynch, 2004) or deducing an hypothesis from data collected from the sample. To increase organisational knowledge quantitative data needs to be collected from large scale studies (Blau & Scott, 1963). Thus, the role of the researcher in quantitative studies is that of a detached controller and observer, examining the impact of the stimuli on effect. The researcher's values and emotions are generally not

discussed or, if they are, only in the sense of how these biases can be eliminated. This maintains the impression or possibility of a theory-neutral observational language and is also seen in the other commonly quoted positivistic approach towards management research - the survey. This research used a large scale survey through a comprehensive questionnaire to achieve these ends, to test its hypotheses and deduce the meanings of the terms identified above.

Surveys place emphasis upon cross-sectional analyses, using standardized measures to compare across situations. They entail the collection of data on a number of respondents or units, usually at a single juncture in time. The aim is generally to collect systematically a body of quantifiable data in respect of a number of variables which can then be examined to discern patterns of association (Bryman, 1992).

However, a quantitative researcher needs to be aware of certain shortcomings of survey methodology. Surveys enable the researcher to obtain data about practices, situations or views at one point in time through questionnaires or interviews. Quantitative analytical techniques are then used to draw inferences from this data regarding existing relationships. The use of surveys permit a researcher to study more variables at one time than is typically possible in laboratory or field experiments, whilst data can be collected about real world environments. A key weakness is that it is very difficult to realise insights relating to the causes of, or processes involved in, the phenomena measured. There are, in addition, several sources of bias such as the possibly self-selecting nature of respondents, the point in time when the survey is conducted and in the

researcher him/herself through the design of the survey itself (Holden & Lynch, 2004).

Similarly, a survey questionnaire can make it very difficult to identify causation. Data from surveys generally provide correlations but not causation, therefore survey researchers have developed a wide variety of procedures for elucidating causality by means of a post hoc reconstruction of 'the logic of causal order' (Davis, 1985) that lies behind the cluster of variables generated by a particular investigation.

4.4 Research Theory

This research was based upon the concept of 'uncertainty' (Carbonara & Caiazza, 2010) which holistically covers proactive behavior, building internal capabilities and strategic planning to remain competitive by responding to uncertainty in relation to external factors.

Response to uncertainty is based on a firm's ability to evaluate the impact of potential approaches on the process of implementation of its strategy (Boyd & Fulk, 1996; Fahey & Narayanan, 1986; Jackson & Dutton, 1988; Justin Tan & Litsschert, 1994; Lorange, Morton, & Ghoshal, 1986; R. E. Miles, Snow, Meyer, & Coleman, 1978; R. E. Miles, Snow, & Pfeffer, 1974; R. Miller, 2017; Smircich & Stubbart, 1985; A. Wilkinson, 2017)

In particular, firms that actively search for change and uncertainty assuming a proactive behaviour are viewed as more successful (Cyert & March, 1963). Proactive firms, in more uncertain environments, tend to turn challenges into opportunities (Jarzabkowski, Kaplan, Seidl, & Whittington, 2016; Khandwalla, 1976; R. E. Miles et al., 1978; Paine & Anderson, 1977). Environmental uncertainty

has long been recognised as an important variable in the explanation of organisational performance (March & Simon, 1958). External uncertainty, in fact, reduces firms' ability to identify cause-effect relationships (Duncan, 1972). Some researchers have made the assumption that uncertainty harms firms' performance (Lorenzi, Sims, & Slocum, 1981). However, instead of the level of external uncertainty, the perception of environmental states of uncertainty and strategy making process affect firms' performance (Aguilar, 1967; C. R. Anderson & Paine, 1975; Andrews, 1971; Bourgeois, 1980; Downey et al., 1975; Duncan, 1972; Epstein, 2018; Hambrick, 1982; Martínez-Ferrero, Banerjee, & García-Sánchez, 2016; Uytterhoeven et al., 1977).

Based on the concepts of uncertainty and strategic foresight identified above for the purpose of this research, it was decided that an exploratory theory based research design would be most appropriate to explore perceptions and experiences of business leaders in the Pakistan Textile Industry. Exploratory theory was considered as there is not a significant theory currently in the literature regarding strategic foresight based resilient competitiveness. Exploratory research, was chosen as it would identify and give clarity to the implications of the research topic in the Pakistan Textile Industry.

4.5 Research Objectives

The research is an attempt to analyse how major organizations in the Pakistan textile industry may strategise to achieve competitiveness, in the face of the aforementioned competitive pressures present and future, through strategic foresight and management practice processes. The research explores whether strategy, strategic foresight and management practices can make a difference to the performance of the textile organizations in Pakistan. In order to attain the

research objectives Both primary and secondary data were gathered. This section describes how this data was collected and analysed. The quantitative side was the basis for a formal systematic approach that allowed for the gathering of empirical data to facilitate measurability of strategy (forecasting, participation, and observation), strategic foresight, management practices, and organizational performance in the Pakistan Textile Industry.

4.6 Credibility of Research

For research to create knowledge and have an impact it must be credible (O'Leary, 2004). Credibility is demonstrated by indicators such as validity and reliability (O'Leary, 2004).

4.6.1 Validity

Validity of research answers the question whether the findings are really about what they appear to be about (Saunders, Lewis & Thornhill, 2009). Thus it concerns itself with whether the instruments used for measurement are accurate and that they actually measure what they are intended to measure.

In my research I had to reduce concepts to a scale of observable indicators. In this regard Lazarsfeld's (1958) scheme was used, which involves four key steps: imagery, concept specification, selection of indicators and formation of indices (Johnson & Duberley, 2000; Lazarsfeld, 1958). So validity in the research was concerned with the extent to which the measurement (questionnaire used) provided an accurate reflection of the concept under study (Johnson & Duberley, 2000). To achieve this great care was taken to make the questionnaire as comprehensive as possible, while also ensuring that the same concept was addressed through multiple questions on the questionnaire.

4.6.2 Reliability

According to Schriesheim et al. (1993) there is a close connection between validity and reliability, and unless a measure is reliable it cannot be valid. Reliability is concerned with uniformity and standardization in what is being measured, so that the same research methods used in a new study would replicate the findings of the current research (O'Leary, 2004). Robson (1993) identifies four major threats to reliability: subject error; subject bias; observer error and observer bias. In this research great emphasis was made to ensure that these errors do not cloud the result. The questionnaire was given to a large group with the aim of eradicating biases and the questions themselves were selected after extensive consultation to prevent observer bias.

4.6.3 Generalizability

Generalization is about drawing a general conclusion from specific observations, generating causal laws which have predictive powers (Johnson & Duberley, 2000). Since surveys are usually carried out with limited sample size this

objective is often difficult to achieve. Le Compte and Goetz (1982) have identified four threats to generalization:

1. Selection: Findings being specific to the group studied.
2. Setting: Findings being specific to, or dependent on, the particular context in which the study took place.
3. History: specific and unique historical issues may determine or affect the findings.

4. Construct effects: The particular constructs studied may be specific to the group studied. (Johnson & Duberley, 2000; LeCompte & Goetz, 1982).

To ensure generalizability of findings this research has taken a large sample size of actors in the textile sector in Pakistan. The selection of the textile sector is predicated on the need to test hypotheses about strategy, strategic foresight, management practices and organizational performance to arrive at conclusions which can provide insights for other firms working in uncertain environments.

It is not always possible to meet all the hallmarks of science in full. Wide generalizability is often difficult to obtain in research (Sekaran & Bougie, 2016). The findings of the study could be generalizable to the textile sector. However, generalizability to other sectors is limited and the findings should be cautiously interpreted in context of other sectors.

The preceding philosophical understanding was the basis for data collection and its analysis for this research project and as mentioned earlier was divided into four phases which are discussed in detail below.

4.7 Research Strategy

4.7.1 Phase One: Critical Literature Review

The first stage of the literature review was a general overview of the literature on strategic foresight, competitiveness, and uncertainty (including uncertainty's effect on firms and possible strategies to deal with it), and management practices. This provided grounding for later research and formed part of the basic bedrock on and around which this thesis is constructed. The second stage of the literature review included a more particular review of the literature. This time emphasizing the textile industry in South Asian countries

with regards to competitiveness issues that firms from there may face in the regional and global markets. The third stage revolved around the Pakistan textile industry. This included a comparative analysis between the environment in Pakistan and regional South Asian countries. The rationale for this analysis was twofold: (i) to form a preliminary conclusion as to the environment in Pakistan, how this environment affects the textile industry in that country and the steps needed to mitigate or counter the issues as identified by research; (ii) to provide a preliminary answer to these questions through a comparative analysis - how can relevant Pakistani institutions and the contemporary political economy address issues of competitiveness affecting the textile industry in the country.

For identification of relevant literature and to gain a deeper understanding of the topic area, the search terms initially used included and revolved around: Strategic foresight, competitiveness and uncertain business environments, and management practice. The extensive resources available at University of Warwick Library and Warwick Business School were utilised and although the list is not exhaustive these included: Sage, Springer, Wiley, Business Source Complete (EBSCO), Science Direct and Emerald.

4.7.2 Phase Two: Systematic Review of Secondary Data

This phase of the research involved a systematic review of the secondary data gathered on Pakistan's textile industry. Under the positivist framework, secondary documentation allowed the study to develop an evidence based interpretation of practices within the textile industry. The secondary data gathered for this study was based on audited financial reports and statistical reports. This financial and statistical data provides credible indicators to measure

the performance of the businesses and the rate of success and failure in the textile sector. The financial and statistical information was primarily gathered through: All Pakistan Textile Mills Association, Pakistan Planning Commission, Pakistan Statistical Bureau; the Chambers of Commerce both at the federal and provincial level and the relevant stock exchanges.

4.7.3 Phase Three: Collection of Primary Data

The data under this phase was gathered through survey questionnaires. For data collection small and medium sized companies from the textile sector were selected. The reason for disregarding large scale companies was that uncertain environments most significantly affect small and medium scale enterprises as opposed to large scale enterprises which due to their sheer size are in a better position to adequately deal with uncertain and turbulent environment (Agarwal, 2014).

4.7.3.1 Questionnaire

The third phase of the research included the development of a well structured questionnaire for corporate executives and middle-managers in the textile sector. With the help of The All Pakistan Textile Mills Association (APTMA) 350 survey questionnaires were sent to pre-selected textile organisations based on specific criteria. All Pakistan Textile Mills Association (APTMA) is the trade association for textile spinning, weaving, and composite mills representing the textile sector in Pakistan.

The organisations were medium scale enterprises as mentioned above with between 500 to 1000 employees; aged between 21-40 years old and all with family ownership. There are over 1000 textile organisations in Pakistan so it was

necessary to narrow the sample size to manageable proportions. There was a total of 300 survey questionnaires distributed. There was one questionnaire for each textile organizations. The questionnaire was filled by a senior manager or person in the administration. Since they are familiar with organizational affairs and have knowledge of strategy, management practices and performance of the organization. The response rate was 83.33% as a total of 250 companies responded with fully completed questionnaires. Based on the number of responses and the comprehensiveness of the questionnaire this phase of the data collection was successful.

The introductory section of the question informed participants that the main aim of the survey was to obtain information on the prevalent management practices of their firms and their perception of organizational performance. The first part of the questionnaire contained several items that were related to the profile of the companies from which the data was collected. These include number of employees, length of company operations, percentage of international sales, family member as CEO, and whether control was transferred to eldest son. In the second part of the questionnaire, the participants provided responses to questions pertinent to organizational performance and management practices. Questions relating to organizational performance were based on common measures of performance in the literature: Growth of profits, growth of sales volume, growth of market share, after tax return on total assets, after tax return on total sales, ratio of total sales to total assets, overall performance/success (the full questionnaire is set out in Appendix 1). For company performance respondents were asked *'Over the last 3 years how*

satisfied are you with your company's performance in terms of the criteria including sales, market share, tax return, sales, and overall performance', with responses anchored from 1 (= Definitely Worse) to 5 (= Definitely Better)

Questions relating to management practices were derived from the questions underlying Bloom et al.'s (2012) study. Sample statements include "Process improvements are made only when problems arise" for Problem Process Documentation, "KPIs are measured frequently" for Company Performance Tracking, (The complete list of items for each of the management practice are provided in Appendix 1). A Likert scale with anchors from 1 (= strongly disagree) to 5 (= strongly agree) was used for the questions related to management practices.

4.7.3.2 Common Method Bias

The study is cross sectional, where data were collected at a single point in time. The data was gathered just once, from July 2016 to September 2016. Hence, the data may be subject to the possibility of common method bias (CMB). Statistically, as a diagnostic procedure, Harman's one-factor test was used to test for the presence of a single factor across all the items (Chang, van Witteloostuijn & Eden, 2010). The procedure of Harman's one-factor test involves the Exploratory Factor Analysis (EFA) (using unrotated principal component analysis as well as principal component analysis with varimax rotation) in this process all variables/items from all the constructs were added for EFA. The test is an estimate to determine whether the majority of the variance in the variables could be accounted for by one general factor. According to Podsakoff et al. (2012) common method bias exists if only one factor accounts for more than 50% of the variance among the measures when they were

subjected to exploratory factor analysis (EFA) with un-rotated factor solutions. The variance explained by single factor was 32.829% which was less than 50% cut off criteria showing the absence of CMB in the current study. Additionally, Podsakoff et al. (2003) noted that method bias can result from common scale properties (i.e., scale type, number of scale points). Hence, in the study the Likert scale with anchors from 1 for strongly disagree to 5 for strongly agree was used in the study for Management Practices and 1 = Not at all satisfied to 5 = Extremely satisfied for company performance.

4.8 Research Methods for Strategic Foresight and Company Performance

The survey questionnaire was developed in the following way to measure the effect of strategic foresight on company performance.

4.8.1 Construct Domain

This step involved the operationalization of strategic foresight. This involved identification of what makes up strategic foresight i.e. definition of the construct in the extant literature as described in the literature review of this thesis.

4.8.2 Item generation

The second step after identification of the domain of the construct involved generation of items that make up strategic foresight. For this purpose, the study relied on existing literature and its conceptualization of strategic foresight, eight items were finalized based on the initial literature review.

4.8.3 Expert Validation

After the items were proposed for the scale based on the existing literature, the items were presented to an academic expert for validation. At this stage the

finalising of items was concluded, and the questionnaire was completed. Questions targeted whether the firm attempted to engage in activities to achieve strategic foresight.

4.8.4 Analytical Technique – Structural Equation Modelling (SEM)

SEM is an established and popular statistical approach used by researchers. The technique examines the relationship between predictor variables (exogenous variable) and criterion variables (endogenous variables). Structural equation modelling (SEM) was conducted to test the hypothesized relationships between strategic foresight and organizational performance and management practices and organisational performance. The statistical software AMOS 20 was used to implement the SEM technique that validates the research model and identified the fit indices.

In the initial phase, confirmatory factor analysis was conducted to relate the variables to the factors. The proposed paths of the variables to the latent factors were also tested in this phase. In the second phase as well as testing the direct effects of the proposed relationship, SEM was used to examine the relationship between the variables.

4.8.5 Phase Four: Data Analysis

It is here that the strategic foresight and competitiveness logic is to be tested as to its soundness in Pakistan and how it can also play a role in countering environmental uncertainty. The fourth phase of the research deals with consolidating the findings of the previous three phases to produce a comprehensive picture about competitiveness in the Pakistan textile industry.

The statistical data analysis utilised the SPSS software.

In addition to this, the analysis intrinsically involved a cross comparison of the primary and secondary information collected during the first three phases of the research. These findings would be used to propose possible solutions to businesses facing competitiveness issues.

4.9 Structural Equation Modelling

The following section will address the main statistical analysis technique specifically utilized for testing the formulated hypotheses of this study.

In this stage the structural equation modelling (SEM) is conducted to test the hypothesized causal relationship between factors, lower order factors and higher order factor in the structural model. SEM, one of the most popular statistical approaches used by researchers for decades, examines the relationship between continuous or discrete predictor variable (exogenous variable) and continuous or discrete criterion variable (endogenous variable) by using several techniques. It also combines the analytical techniques of confirmatory factor analysis and regression to eliminate variance errors to accumulate the common variance of the variables. Based on Maximum likelihood and chi-square, structural equation modelling estimates the relationships of the paths in the model and provides several fit indices. Using AMOS 20 structural equation modelling is conducted in this study to validate the research model and identify the fit indices. The confirmatory factor analysis was conducted to relate the variables to the factors in the initial phase. The proposed paths of the variables to the latent factors were tested in this phase. In the second phase the SEM was used to find out the relationship between the first order and second order factors. In this phase the direct and indirect effects of the proposed causal

relationship were tested. According to Hair et al. (2005), multiple indices should be executed to test the model fit. The dimensions of fit indices used in structural equation modelling include Chi-square, Degree of freedom, Goodness of fit index (GFI), Root Means Square Error Approximation (RMSEA) and Non Normed Fit Index (NNFI).

SEM is the most appropriate approach for comprehensively testing each model. It may be used as a more powerful alternative to multiple regression, path analysis, factor analysis, time series analysis and covariance analysis. Additionally, it combines an econometric focus on prediction with a psychometric perspective on measurement, using multiple observed variables as indicators of latent or unobserved concepts. This then enables the researcher to simultaneously cope with the issues of construct measurement and the structural relationships amongst the constructs. Besides, SEM is preferable as a technique for testing causal relationships contained in a theoretical model (Mayer, 2005).

Additionally, SEM is a statistical methodology that takes on hypothesis testing (i.e., confirmatory) approach of the multivariate analysis (Hair, Ringle, & Sarstedt, 2005). Tabachnick & Fidell (2001) assert that SEM can be viewed as a confirmatory technique for model testing. Moreover, MacLean & Gray (1998) affirm that SEM generally involves the specification of an underpinning linear regression-type model (incorporating the structural relationships or equation between unobserved or latent variables) along with a number of observed or measured indicator variables.

In this study, unobserved or unmeasured (latent) variables are those which represent concepts or theoretical constructs that cannot be directly measured.

By virtue of the fact that latent variables are basically unobservable, its measurement must be indirectly obtained (MacLean & Gray, 1998). Hence, SEM is able to provide an appropriate and most efficient estimation technique for series of separated multiple regression equations simultaneously estimated (Hair et al., 2005).

Based on the explication of SEM, the hypotheses of this study will be tested by the application of SEM to the dataset. Having validated the construct, SEM technique will be applied in two stages. In seeking for parsimony, a competing model would be proposed.

Two basic advantages of using SEM as opposed to more traditional analysis techniques are, first, it is able to represent the interrelated latent concepts and to account for measurement error in the estimation process;; second, it allows to estimate multiple and interrelated dependence relationships. Unlike multiple regression analysis, SEM can estimate several equations at once. For instance, SEM through a single model allows estimation of factor loadings for items of a underlying construct and furthermore assess the impact of the factor on the criterion variable. In the study SEM was utilized to simultaneously ascertain the loadings for items representing a particular construct and further ascertain its impact on the criterion variables, additionally in a similar model, the study also assessed the impact of control variable (as performed in section 7.3 in the analysis). These equations can be interrelated so much so that the dependent variable in one equation can simultaneously be an independent variable in one or more other equations. Hence, it allows modelling of complex relationships which is not possible with any of the other multivariate techniques available (Fornell & Larcker, 1981; Hair et al., 2005; Steenkamp & Van Trijp, 1991).

Chapter Summary

This chapter described the research method adopted in this thesis, by identifying its epistemology and theoretical perspective. For this research the positive epistemological framework was chosen. The positivist framework follows a deductive approach. This research started with a deductive approach. For data collection small and medium sized companies from the textile sector were selected. With the help of The All Pakistan Textile Mills Association (APTMA) 350 survey questionnaires were sent to pre-selected textile organisations based on specific criteria. All Pakistan Textile Mills Association (APTMA) is the trade association for textile spinning, weaving, and composite mills representing the textile sector in Pakistan. The response rate was 83.33% as a total of 250 companies responded with fully completed questionnaires. CMB test showed absence of CMB in the current study. Data was analyzed using SEM. SPSS 21 was used for descriptive statistics and comparative tests while AMOS 21 was utilized for SEM.

CHAPTER 5

Characteristics of the Sample and Descriptive Statistics

The data collected was analysed to further enhance the understanding of business environment, strategic foresight, management techniques, management practices, and constraints on management, subsequently, the results were reported, starting with the descriptive statistics that explain the means and standard deviation of the constructs in the study.

5.1 Demographic Profile of Companies

5.2 Number of Employees

Textile companies were asked to identify the number of Employees in the company. The average number of employees in the company was 683 (SD: 91.62). The minimum number of employees was 500 while maximum were 980. The number of Employees were further classified into different classes. The results of categorization are shown in the Table 5.1.

5.3 People Reporting

The respondents were asked to identify the number of people reporting to them. The people reporting ranged from 12 to 100. The mean of people reporting was 35.12 (SD: 17.37). Majority of the companies (73, 29.2%) revealed that 21-30 people were reporting to them. It is worthy to note that 4

respondents revealed that 91-100 people were reporting to them. The results are summarized in the following table 5.2.

5.4 Length of Company Operations

Each of the textile companies in the study was asked to provide information pertinent to their length of operations/age. The results revealed that minimum length was 21 while the maximum length was 40. The average length of operation was 30.60 years (SD: 4.98). The length of operation was further classified into different classes; the results revealed that 82 companies had length between 31-35 years while 48 companies had length of operation between 21-25 years. The results of categorization are shown in Table 5.3.

5.5 Domestic Competitors

The textile companies studied in the current research were asked to identify the number of domestic competitors that they face. The results revealed that minimum number of competitors were 100 while the maximum was 225. The average number of domestic competitors was 157.08 (SD: 25.80). The number of domestic competitors was further classified into different categories, the results revealed that 149 companies had domestic competitors in the range of 150-199, while only 10 companies had domestic competitors between 200 to 249. The results of categorization are shown in Table 5.4.

5.6 International Competitors

The textile companies studied in the current research were asked to identify the number of international competitors that they face. The results revealed that minimum number of international competitors was 150 while the

maximum was 415. The average number of international competitors was 308.768 (SD: 58.05). The number of international competitors was further classified into different categories, the results revealed that 141 companies had international competitors in the range of 250-349 while 39 companies had international competitors from 150 to 249. The results of categorization are shown in Table 5.5.

5.7 Sales Revenue from International Sales

The textile companies in the study were asked to identify the sales revenue in percentage that comes from international sales. The majority of the textile companies (85, 34%) revealed that 15% of their sales revenue is attained from international sales. The maximum revenue from international sales in percentage was 45% reaped only by four textile companies. The results of the sales revenue from international sales is summarized in Table 5.6.

5.8 Company Description

The respondents were asked to describe their company. Company was categorized into three different categories namely Dependent on one single product for at least 95% of total company sales, Dependent on one major area of related products which accounts for at least 70% of total company sales, and Diversified into more than one major product area (no single business accounts for more than 70% of total company sales). The majority of the companies (220, 88%) were diversified into more than one major product area while only 4% (10) companies were dependent on one single product. The results of the analysis are summarized in Table 5.7.

5.9 Customer Organizations

The textile companies were asked the number of customer organizations they service. The results revealed that on average they are serving around 145 different organizations. The results of frequency analysis further revealed that 118 companies had customer ranging between 100-150 while a majority 132 organizations had customers between 151-200. The results of categorization are shown in Table 5.8.

5.10 Family Members in Management

The companies were asked to identify the number of family members who serve in the management of the company. The results revealed that the range of family members who serve as members of the management range from 0 to 5. The majority of the firms (95, 38.4%) in the study did not have any member of the family in management while only 5 firms had the maximum 5 members of the family in the management. Table 5.9 shows the number of family members in the management against the number of firms.

5.11 Supplier Organizations

The textile companies studied in the current research were asked the number of supplier organizations they take supplies from. The results revealed that on average they are receiving supplies from 61 organizations. The results of frequency analysis further revealed a majority (147, 58%) of companies were taking supplies from 61-80 suppliers. The results of categorization are shown in Table 5.10.

5.12 Percentage Company's sales taken Single largest customer

Textile companies provided information pertinent to the company's sales taken by a single largest customer. The percentage sales taken by a single customer ranged from 5% to 40%. Ten companies reported that 40% of their sales are taken by a single customer. While the least percentage taken by a single customer was 5% for 7 companies. Table 5.11 shows the percentage taken by the single largest customer against the total companies that have mentioned the percentage.

5.13 Competitors Monitored

Textile units in the study were required to mention the number of competitors that they monitor. The range of competitors monitored ranged from 10 to 20. The average number of competitors were 15.64 (SD: 2.13). The results of frequency analysis revealed that most (58) companies monitor 16 competitors while four companies monitor 10 to 11 competitors. The results of analysis are summarized and in Table 5.12.

5.14 Sites under Company

The textile companies were asked to reveal the number of sites that each company has. The maximum number of sites operated were 8. Out of the total 250 companies, 69 companies had four sites while only 12 companies had a total of 8 sites. The results are summarized in Table 5.13.

5.15 Family Member as CEO

Respondents from the textile mills in the study were asked to identify if the CEO is a family member. The results showed that the majority 141 (56.4%) of the

textile firms have a family member as CEO while 109 (43.6%) of the CEO's were not family members.

5.16 CEO Control to Eldest Son

Respondents from the textile mills in the study were asked to identify if CEO control was transferred to the eldest son. The results showed that in the majority (141, 56.4%) of the textile firms control was transferred to the eldest son while in 108 (43.2%) instances the control was not transferred to the eldest son as shown in the given table 5.15.

5.17 Constructs Descriptive Statistics (Mean and Standard Deviation)

The descriptive statistics including mean and standard deviation are reported in this section. Descriptive statistics help in the provision of an overall picture of how the respondents in the textile companies perceived the effectiveness of the constructs in the study.

5.18 Government and Environment

Government and environment construct was made up of three sub-dimensions including the business environment, querying the textile businesses about the favourability of the current business environment in Pakistan, Government actions, asking for the perception about the necessary government actions that should be taken to facilitate the business environment, and finally investment and environment, inquired about the factors that an investor considers before making a new investment. Descriptive statistics for each of the items in the three sub-dimensions are provided in Table 5.16 to 5.17. The total number of respondents in the study were $n = 250$.

5.19 Business Environment

Business environment construct evaluates the perception of the textile companies pertinent to the favourability of the business environment for textile companies. Although, the respondents are in agreement that business situation has worsened, political situation is hampering growth, and competition from abroad is destroying the domestic textile industry, they still believe that there is great potential for textile industry and that GSP plus status has helped the exports.

5.20 Government Actions

Respondents were asked to identify what government actions should be taken in order to foster growth in the textile industry. All mean values were close to 4 (on the Likert Scale). Hence, Respondents unanimously agreed that government should provide tax assistance, maintain law and order, invest in R&D, invest in universities, build relationship with foreign countries, provide protection from foreign competition, and making efforts to open up new markets as shown in the table 5.17.

5.21 Investment and Environment

Respondents from each of the textile companies were asked to rate the importance of the factors that are considered before making an investment decision. The results of descriptive statistics show that all the factors considered in the study had mean values close to 4 (on the Likert Scale). Hence, respondents unanimously agreed that all factors, that is, local elections, political unrest, terrorist attacks, tensions with neighbours, stock exchange

fluctuations, government spending and energy supply are important in the investment decision. Descriptive statistics are presented in Table 5.18.

5.22 General Strategy

The respondents of the 250 textile firms provided their perceptions of how well their organizations engage in the general strategy that includes observation, forecasting, and participation. The respondents were asked to identify how frequently they pursue the general strategies. The anchors for the Likert scale were 1 = Never, 2 = infrequently, 3 = Occasionally/Sometimes, 4 = Often, and 5 = Always. Table 5.18 clearly highlights the general strategies the companies pursue in order to enhance business effectiveness. Overall the textile companies pursue all the different strategies listed, the respondents are in agreement that their respective companies follow the different strategies. General strategies are pursued by the organization frequently since their mean values are over 4. The different strategies and their respective mean scores are presented in Table 5.19.

5.23 Strategic Foresight

The respondents were asked to provide their agreement with the initiatives for developing strategic foresight in the company. A number of different initiatives were listed and the respondents from each of the textile firms were asked to share the level of agreement as to whether the initiative is undertaken by their company or not. The anchors for the agreement scale were 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree. Table 5.20 clearly highlights that all the textile units are taking initiatives to develop strategic foresight.

5.24 Satisfaction with Company Performance

Respondents from each of the textile mills were asked to subjectively assess their firm performance. Respondents were asked to identify their satisfaction with firm performance on the following indicators: profits, sales volume, market share, tax return on assets and sales, and overall performance. The anchors for the satisfaction scale were 1 = Not at all satisfied, 2 = slightly satisfied, 3 = moderately satisfied, 4 = Very satisfied, and 5 = extremely satisfied. The mean analysis reveals the respondents agree that the company has seen growth in sales and market share, after tax return on total assets & sales and ratio of total sales to total assets. Table 5.21 clearly highlights that all the indicators are utilized to judge the level of satisfaction.

5.25 Management Techniques

Respondents were asked to identify how frequently their firm uses a total of 21 different management practices. The anchors were the use of different management techniques were 1 = Never, 2 = infrequently, 3 = Occasionally/Sometimes, 4 = Often, and 5 = Always. The results show that the textile mills in Pakistan are using a majority of the management techniques. The results revealed that the most used management technique is Enterprise Resource Planning while the least used techniques are Business Process Re-Engineering and 6-Sigma. Table 5.22 highlights the different management techniques against their usage score from one to five.

5.26 Management Practices

Respondents were asked for their agreement on the extent to which different management practices are followed.

5.27 Problem Process Documentation

Problem process documentation evaluates the extent to which the textile company sought problem process documentation. The respondents were asked to identify the extent to which process improvements occurrence of process improvement. The descriptive statistics show that overall the firms agree that process improvements is a normal and continuous process. The results of descriptive statistics are presented in Table 5.23.

5.28 Company Performance Tracking

Respondents were asked to identify the extent to which the firms have company performance tracking. All mean values were close to 3.5. Hence, Respondents to a certain extent agreed that companies have company performance tracking practices. Table 5.24 shows the extent to which the respondents agree that different performance tracking practices are followed.

5.29 Company Performance Review

Respondents were asked to provide input on the company performance review practices. The construct evaluates the extent of agreement the respondents have with respect to the company performance review practices followed by the firm. The anchors used for gauging agreement were 1 = strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = strongly agree.

The construct discusses the frequency of performance review, follow-up, and communication. The results of descriptive statistics shown in Table 5.25

revealed that to a certain level performance reviews are frequent, with follow-up, and communication to improve the performance.

5.30 Company Performance Dialogue

The subject companies were asked to provide input on the extent to which there is a healthy dialogue on the company performance. The construct evaluates the extent of agreement the respondents have with respect to the company performance dialogue practices adopted by the firm. The anchors used for gauging agreement were 1 = strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = strongly agree. The construct discusses the data, agenda, problem identification, and feedback. The results of descriptive statistics revealed that subject firms agree to the notion that there is effective discussion on the company performance and that review meetings present and focus on the right data with clear agenda, discussion, and constructive feedback. The descriptive statistics are shown in Table 5.26.

5.31 Consequence Management

The respondents were asked to provide input on the extent to which certain consequences are faced on failure to attain the agreed objectives. The construct evaluates the extent of agreement the respondents have with respect to the consequences faced by the employees in the company on failure to achieve the agreed objectives. The anchors used for gauging agreement were 1 = strongly disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = strongly agree. The construct discusses the consequences for failure, toleration level, retraining on failure, and reassignment. The descriptive statistics revealed that employees in subject firms have to face a certain set of consequences upon

their failure to achieve the agreed objectives. The descriptive statistics are presented in Table 5.27.

5.32 Company Target Balance

Each of the respondents provided information pertinent to the nature of their company targets. The construct discusses the extent to which the targets are financial, non-financial, senior managers target perception, and part of targets in appraisal of top management. The results of descriptive statistics revealed that goals in textile companies under study are not entirely financial, and there is mix of both financial and non-financial targets. The descriptive statistics revealed for each of the item measuring the company target balance are summarized in Table 5.28.

5.33 Company Target Interconnection

The company target interconnection construct evaluates how well the company targets are connected to the accounting figures, shareholder, individuals, and business units. The results of the descriptive statistics revealed that respondents do not entirely agree whether company goals are connected to shareholder value, goals are specific and linked to business units, and define individual expectations. However, goals are not clearly cascaded down to individuals. The means analysis of each of the items measuring company target interconnection are reported in Table 5.29.

5.34 Company Target Time Horizon

The subject textile companies provided their perspective on the target possibilities. The factor discusses if the management practices focus on short

term or long-term goals, does the management establishes a connection between short and long-term goals. The results reveal that there is a certain amount of agreement on focusing and developing link between both short and long-term goals with disagreement on explicit focus on short term and independence of short and long-term goals. The descriptive statistics for each of the items pertinent to company targets are presented in Table 5.30.

5.35 Company Target Stretching

Company target stretching construct measures the level of difficulty of the company targets and individuals' ability to meet the targets. The results revealed that company goals are challenging and are based on economic conditions. The individuals are able to meet the targets. The descriptive statistics for target stretching are appended and summarized below in Table 5.31.

5.36 Individual Performance Clarity

One management practice than can help the organization to foster performance in individuals is the performance clarity for individuals. Individual performance clarity construct evaluates the extent to which the textile mills have clarity of individual performance measures and the extent to which performance is compared. The results of descriptive statistics revealed that performance measures for individuals are well-defined and clear. Although, comparisons of individual performance is not encouraged, they are made public to encourage healthy competition among individuals. The descriptive statistics are summarized in Table 5.32

5.37 Managing Talent

The managing talent construct explores how well the practice of managing talent is effectively followed by the top management in the textile businesses operating in Pakistan. The mean analysis revealed that senior managers give top priority to attracting and developing talent, and also to understand the role talented employees can play in creating a winning organization, senior managers are evaluated and rewarded on their ability to build and strengthen the talent pool in the company. Table 5.33 summarizes the descriptive statistics for senior manager's talent management initiatives.

5.38 Rewarding High Performance

The next management practice required the respondents to highlight the extent to which they reward high performance. Reward for high performance was estimated using reward performance link, evaluation system, competition, non-financial rewards, and approach to identification of individual performance. The results for construct measuring reward for high performance revealed that rewards are linked to how well the individual performance with a clear systematic approach being followed for identifying individual performance. The means for each of the items in reward for high performance construct are identified in Table 5.34.

5.39 Removing Poor Performers

The management practice to evaluate the extent to which initiatives are taken to remove poor performers. Removal of poor performers is measured using items that ask if poor performers are removed, change of roles, moving

poor performers out and to new role, avoiding being caught and toleration for underperformance. The results for construct measuring removal of poor performers revealed that textile mills do have procedures in place to rectify the poor performance and that poor performance is not tolerated in the subject textile mills. The means for each of the items in removing poor performance construct are identified in Table 5.35.

5.40 Promoting High Performers

Data was gathered on the practices of promoting high performers. The items asked about the mechanism of how employees are promoted in the organization. The results of descriptive analysis revealed that employees are promoted primarily on the basis of performance instead of length of service. Furthermore, the companies actively develop and promote top performers. The results of mean analysis are summarized in Table 5.36.

5.41 Attracting Human Capital

The next management practice evaluated was pertinent to the initiative to attract human capital. The items asked about the mechanism of how textile mills attract human capital. The results of descriptive analysis revealed that there is a disagreement on ability of competitors to attract talent, the companies provide rewards and benefits at par with their competitors. The results of mean analysis are summarized in Table 5.37.

5.42 Retaining Talent

The companies were asked to assess the extent to which different initiatives are undertaken by the textile firms to retain talent. Talent retention is

measured through identification of agreement with initiatives to keep talent. The results of descriptive statistics revealed that the organizations do make an effort to retain talented employees in the company. The summary of mean analysis for each of the items in talent retention construct are summarized in Table 5.38.

5.43 Constraints on Management

Respondents were asked to identify the extent to which the listed obstacles hinder improvement of management practices. The results of mean analysis revealed that the biggest obstacle is hiring non-managers with the right skills while the obstacle with the least impact was employment laws and regulations. The respondents believe that there are a number of different obstacles faced by the textile firms. The obstacle and their respective difficulty score (1: Not an Obstacle – 5: Major Obstacle) are shown in Table 5.39.

5.44 Differences across Demographics

After describing the demographics and descriptive statistics of each of the constructs of the study, the study assesses whether there exist any differences in variables across different groups in the grouping variables in the study, such as, the number of employees or length of company operations.

A series of One-Way ANOVA analyses were performed to evaluate whether there exists a significant difference in Government and Environment, General Strategy, Strategic Foresight, Management Practices, Management Techniques, and Company Performance across different groups for number of Employees, number of People Reporting, Length of Company Operations, Domestic Competition, International Competition, Customers for Organization,

and Organization Suppliers. The results of ANOVA analyses revealed that there are no significant differences in the textile sector in the different constructs across different categories for the categorical variables specified. The exceptions are Strategic foresight which was found to be significantly different across the companies with different number of employees and number of customer organizations while general strategy was also found be different in number of customer organizations. The results overall indicate that the demographics do not have a significant impact on the Government and Environment, General Strategy, Strategic Foresight, Management Practices, Management Techniques, and Company Performance. The results of One Way ANOVA analysis are shown in Table 5.40.

The results from assessment of differences identify that none of the constructs differ across the different demographic demographics. This shows the none of the constructs (government and environment, general strategy, strategic foresight, management practices, management techniques, and firm performance) did not differ across any of the demographic variables like number of employees, people reporting, domestic competitors, international competitors, length of company operations, customer organizations, and supplier organizations. This shows with any changes in the demographics will not effect the different constructs in the study. Only strategic foresight was found to differ across the no. of employees. This could be attributed to the fact the no. of employees can be a measure of the size of the company. The larger the company the greater is the no. of employees. A large company will have a different strategic orientation as compared to a small company.

CHAPTER 6

Exploratory and Confirmatory Factor Analysis

To further enhance the understanding of Business Environment, Strategic Foresight, Management Techniques, Management Practices, and Constraints on Management, the data collected is analysed and results are reported. Different analysis like reliability analysis, exploratory factor analysis, and confirmatory factor analysis are conducted.

6.1 Reliability Analysis

In order to evaluate the internal consistency of the constructs in the study, reliability analysis was performed using Cronbach's Alpha. The value of Alpha can range from .01 to 1. The closer the value to 1 the higher is the reliability. It is recommended that the value for construct reliability is over .70. In this study the value of alpha ranged from .544 to .969. Only one construct Promoting High Performance had low reliability, however, since it was over .50 it can be referred to as fair. All other constructs showed very good reliability. The Alpha value for each construct is summarized in Table 6.1.

6.1 Reliability Analysis

Constructs	Cronbach's Alpha	N of Items
Business Environment	.889	5
Government Actions	.880	7

Investment and Environment	.831	7
General Strategy	.936	17
Weakness in Strategy Implementation	.804	8
Strategic Foresight	.940	8
Management Techniques on Performance	.969	6
Constraints on Management	.920	8
Problem Process Documentation	.856	3
Company Performance Tracking	.877	9
Company Performance Review	.856	6
Company Performance Dialogue	.903	5
Consequence Management	.828	4
Company Target Balance	.886	5
Company Target Interconnection	.853	5
Company Target Time	.881	5
Company Target Stretching	.914	7
Individual Performance Clarity	.924	7
Managing Talent	.887	4
Rewarding High Performance	.869	6
Removing Poor Performers	.916	6
Promoting High Performance	.544	4
Attracting Human Capital	.823	3
Retaining Talent	.874	5

Management Techniques	.970	20
Satisfaction with Company Performance	.934	7

6.1.1 Exploratory Factor Analysis

6.1.2 General Strategy

The general strategy construct had a total 17 items asking the respondents about the overarching strategy adopted by the textile firms to improve its effectiveness. Theoretically the construct had no sub-dimension and was uni-dimensional in nature. Overall the textile companies pursue all the different strategies listed, the respondents are in agreement that their respective companies follow the different strategies. General strategies are pursued by the organization frequently since their mean value is over 4. The 17 questions were factor analysed using principal component analysis with Varimax rotation. Initially the analysis yielded three factors explaining a total of 73.97% of the variance for the entire set of variables. One item Observe the textile business globally was removed due to lack of significant loading. None of the items were removed from the analysis due to low communalities (< .50). Final values for KMO (> .923) and significance of Bartlett's test for sphericity are reported and they show the suitability of factor analysis. The final factor structure shows 77.00% cumulative percentage of variance which is well above the recommended percentage. The final factor structure showed three sub-dimensions named as Observation (Eigenvalue = 2.08, % of Variance = 13.02) with five items, Forecasting (Eigenvalue = 8.42, % of Variance = 52.67) with six items, and Participation (Eigenvalue = 1.80, %

of Variance = 11.30) with five items. The final set of items with loadings and communalities is shown in Table 6.2.

Table: Assumptions Test for General Strategy

KMO	Bartlett's Test	Df	Sig	Cumulative % of Variance
.923	3504.970	120	.000	73.97%

6. 2: Component Matrix for General Strategy

General Strategy	Component			Communalities
	1	2	3	
Observation				
Follow the news (NGS1)	.788			.698
Observe the textile business in neighboring countries (NGS3)	.843			.806
Take into account The problems faced by the textile business in other countries (NGS4)	.881			.878
Take into account the problems faced by The textile business in Pakistan (NGS5)	.840			.826
Identify Practices employed	.870			.832

by foreign textile firms that are your competition (NGS6)				
Forecasting				
Undertake business planning for more than a period of 5 years (NGS7)		.762		.707
Identify the Causes of Uncertainty in the growing textile business in Pakistan (NGS8)		.830		.764
Forecast Demand For the company's products (NGS9)		.839		.810
Forecast Growth in competition (NGS10)		.850		.788
Devise early warning mechanisms to anticipate problems (NGS11)		.763		.680
Undertake Forecasting of future problems (NGS12)		.734		.641
Participation				
Arrange strategy sessions to identify how To overcome			.800	.730

industry problems (NGS13)				
Encourage Employees to engage in forecasting sessions (NGS14)			.838	.815
Encourage Employees to engage in Strategic sessions (NGS15)			.826	.799
Encourage your managers to engage in forecasting sessions (NGS16)			.840	.809
Encourage your managers to engage in strategic session (NGS17)			.792	.737
% of Variance	13.02%	52.67%	11.30%	
Eigen Value	2.08	8.42	1.80	

6.2 Government and Environment

The government and environment construct had a total 19 items asking the respondents about the government actions for improving the business, general business and investment environment. Theoretically the construct had three sub-dimensions namely Business Environment with five items, Government Actions with seven items, and Investment and Environment with seven items. The 19 questions were factor analysed using principal component analysis with Varimax rotation. Initially the analysis yielded four factors explaining a total of 68.14% of

the variance for the entire set of variables. Some of the items were removed from further analyses. Four items failed to load onto their respective theoretical factor. They were removed one at a time and factor analysis was run after removal of each item. One items “There should be efforts to get USA, European and Middle Eastern authorities to increase Pakistan’s textile trade quota” was removed from Government Actions, three items were removed from Investment and Environment due to failure to load onto their respective factors, the items were The outcomes of Local Elections, The extent of political unrest, and the relative scarcity of energy supplies.

None of the items were removed from the analysis due to low communalities (< .50). Final values for KMO (> .60) and significance of Bartlett’s test for sphericity are reported and they show the suitability of factor analysis. The final factor structure shows a 68.69% cumulative percentage of variance which is well above the recommended percentage. Final factor structure with three sub-dimensions and their loadings and communalities is shown Table 6.4.

6. 3: Assumptions Test for Government and Environment

KMO	Bartlett’s Test	Df	Sig	Cumulative % of Variance
.863	2303.193	105	.000	68.69%

6. 4: Component Matrix for Government and Environment

	Component			Communalities
	1	2	3	
Business Environment				
Over the last 5 years the business situation has worsened in Pakistan NBE1	.772			.637
The uncertain domestic political	.719			.604

situation is hampering business growth (NBE2)			
There is great potential for growth of the textile industry in Pakistan (NBE3)	.880		.816
Competition from abroad is destroying the domestic textile industry (NBE4)	.857		.799
GSP Plus status has helped textile exports (NBE5)	.757		.692
Government Actions			
There should be greater tax assistance for firms in the textile manufacturing sector (NGA1)		.830	.730
There should be greater emphasis on maintaining law and order in the country (NGA2)		.832	.750
There should be greater investment in R&D (NGA3)		.812	.710
There should be greater investment in universities to support programs in textile manufacturing (NGA4)		.786	.658
There should be maintenance of cordial relationships with foreign countries (NGA5)		.821	.724

There should be greater protection from foreign competition (NGA6)		.746		.638
Investment and Environment				
The threat of terrorist attack (NIE3)			.743	.605
Heightened tensions between Pakistan and Neighbours (NIE4)			.774	.625
Fluctuations in the Karachi and Lahore Stock Exchanges (NIE5)			.796	.638
Planned government spending on infrastructure (NIE6)			.815	.680
% of Variance	27.75	23.34	17.59	
Eigen Value	6.17	2.21	1.91	

6.3 Strategic Foresight

The construct, strategic foresight had a total eight items asking the respondents about the extent to which the organization has a strategic anticipation. Theoretically the construct had no sub-dimensions and was unidimensional in nature. The eight questions were factor analysed using principal component analysis with Varimax rotation. Initially the analysis yielded a single factor explaining a total of 70.67% of the variance for the entire set of variables. None of the items was removed from the factor analysis. Final values for KMO (> .60) and significance of Bartlett's test for sphericity are reported and they show the suitability of factor analysis. The final factor structure shows 70.67%

cumulative percentage of variance which is well above the recommended percentage. The final factor structure showed that in the current study strategic foresight is unidimensional in nature with eight items. The final set of items with loadings and communalities is shown in Table 6.6

6. 5: Assumptions Test for Strategic Foresight

KMO	Bartlett's Test	Df	Sig	Cumulative % of Variance
.918	1640.095	28	.000	70.67

6. 6: Component Matrix for Strategic Foresight

	Component	Communalities
	1	
Our company has a department which engages in forecasting sessions (NSF1)	.885	.783
Our company has a department which engages in strategy sessions (NSF2)	.863	.745
Encouraging foresight would increase the competitiveness of our business (NSF3)	.784	.614
Strategic learning without foresight would be futile (NSF4)	.855	.732
Foresight is an essential competency for a successful business (NSF5)	.838	.702
An early warning mechanism is an essential competency for successful business (NSF6)	.885	.782

Prediction is an essential competency for successful business (NSF7)	.867	.751
Planning is an essential competency for successful business (NSF8)	.738	.545
% of Variance	70.67	
Eigen Values	5.654	

6.4 Company Performance – Satisfaction with Company Performance

The firm performance construct measuring satisfaction with company performance had a total seven items asking the respondents about the extent to which the organization is performing effectively. Theoretically the construct had no sub-dimension and was uni-dimensional in nature. The seven statements were factor analysed using principal component analysis with Varimax rotation. Initially the analysis yielded a single factor explaining a total of 71.89% of the variance for the entire set of variables. None of the items were removed due to multiple failure of significant loading or low communality. Final values for KMO (> .60) and significance of Bartlett's test for sphericity are reported and they show the suitability of factor analysis. The final factor structure shows 71.89% cumulative percentage of variance which is well above the recommended percentage. Final factor structure showed that firm performance is unidimensional in nature with seven items. The final set of items with loadings and communalities is shown in Table 6.8.

6. 7: Assumptions test for Employee Satisfaction with company performance

KMO	Bartlett's	Df	Sig	Cumulative	%	of
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	Test			Variance
.875	1498.953	21	.000	71.89%

6. 8: Component Matrix for Employee Satisfaction with company performance

	Component	Communalities
	1	
Growth of profits	.820	.672
Growth of sales volume	.898	.807
Growth of market share	.843	.711
After tax return on total Assets	.856	.732
After tax return on total Sales	.875	.766
Ratio of total sales to total assets	.836	.699
Overall performance/success	.804	.646
Eigen Value	5.03	
% of Total Variance	71.89	

6.5 Management Techniques

The management techniques construct measuring the extent to which different listed management techniques are used in the firm. Theoretically the

construct had no sub-dimension and was unidimensional in nature. There was a total of 20 management techniques listed in the study. The 20 techniques were factor analysed using principal component analysis with Varimax rotation. Initially the analysis yielded four factors explaining a total of 71.28% of the variance for the entire set of variables. One of the techniques were removed from further analyses, Customer Relationship Management (CRM), due to multiple loading. Final values for KMO ($> .60$) and significance of Bartlett's test for sphericity are reported and they show the suitability of factor analysis. The final factor structure shows 71.25% cumulative percentage of variance which is well above the recommended percentage. The final factor structure showed that management techniques could be divided into two factors namely Management Techniques 1 and Management Techniques 2. The final set of items with loadings and communalities is shown in Table 6.10.

6. 9: EFA Assumptions for Management Techniques

KMO	Bartlett's Test	Df	Sig	Cumulative % of Variance
.964	4558.271	171	.000	71.25%

6. 10: Component Matrix for Management Techniques

	Component		Communalities
	1	2	
Benchmarking	.706		.679
Total Quality Management	.729		.725
Strategic Management	.715		.704

Coaching	.711		.660
Balance Scorecards	.712		.724
Statistical Decision-Making Models		.808	.687
Business Process Re-engineering		.693	.623
6-Sigma		.818	.715
Outsourcing	.842		.791
Strategic Human Resource Management	.850		.752
Supplier Relationship Management (SRM)	.733		.676
Lean Manufacturing	.695		.612
Integrated Marketing Management	.783		.705
Activity Based Costing (ABC)	.847		.781
Strategic Brand Management	.867		.789
Marketing Research	.801		.701
Enterprise Resource Planning (ERP)	.825		.772
Customer Satisfaction Management	.847		.770
Supply Chain Management	.694		.672
% of Variance	51.75	19.49	
Eigen Value	12.29	1.24	

6.6 Management Practices

The management practices construct had a total 84 items asking the respondents about the different management practices employed by the textile

organizations operating in Pakistan. The items were theoretically categorized into 16 different dimensions. The 84 questions were factor analysed using principal component analysis with Varimax rotation. Initially the analysis yielded 16 factors explaining a total of 75.52% of the variance for the entire set of variables. A number of variables were removed in order to attain a clear factor structure. Three items from Company Performance Tracking, KPI tracking is overseen by senior management, Company performance is continually tracked, and Company performance is communicated to all staff were removed since they failed to load onto their respective theoretical factor. One item from company performance review, Company performance results are communicated to all staff was removed due to failure to load onto their theoretical factor. One Item Company goals are based on accounting figures, with no clear connection to shareholder value was removed from company target interconnection construct due to failure to attain the minimum loading ($< .50$). Two items from Promoting High Performers Our company actively identifies, develops and promotes top performers was removed due to lack of significant loading while If two people both joined the company 5 years ago and one was much better than the other, that person would have been promoted ahead of the other was removed due to failure to load onto its respective factor. One item from Company Target Time Horizon There are both short term and long term goals for all levels of the organization was removed since it failed to load onto its respective theoretical factor. One item, I usually meet my individual targets was removed because it failed to load onto its respective factor. Two items from Rewarding Talent My company usually works hard to keep top talent and Some star performers have been persuaded to stay after wanting to leave were removed because they failed

to show significant loading. Finally, one item (PPD2) from Process Problem Documentation worded as Process improvements are actively sought out for continuous improvement loaded onto two factors but it loaded substantially well onto factor 8, the original theoretical factor. The item was retained since removing the item would have left only two items on the factor and the requirement is to have at least three items in a factor. Hence, the item is retained. A total of eleven items were removed as part of exploratory factor analyses and the final factor structure showed 14 factors. The final values for KMO (> .60) and significance of Bartlett's test for sphericity are reported and they show the suitability of factor analysis. The final factor structure shows 73.01% cumulative percentage of variance which is well above the recommended percentage. The final factor structure for management practices showed 14 sub-dimensions. Two constructs Managing Talent and Rewarding Talent loaded together onto a single factor, the factor was named Managing and Rewarding Talent. Rewarding Higher Performers and Promoting High Performers was merged to make one factor named Rewarding and Promoting High Performers. The final set of items with loadings and communalities is shown in Table 6.12.

6. 11: Assumptions Test for Management Practices

KMO	Bartlett's Test	df	Sig	Cumulative % of Variance
.860	17577.925	262	.00	73.01
		8	0	

6. 12: Component Matrix for Management Practices

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Com m
Individual performance measures are complex and not clearly understood (IPC1)	.649														.644
Individual performance measures are well defined (IPC2)	.701														.734
Individual performance measures are communicated well (IPC3)	.673														.752

targets (CTS5)														
My individual targets are tough to meet (CTS6)				.593										.721
Senior managers show that attracting and developing talent is a top priority (MT1)				.694										.632
Senior managers communicate that having top talent throughout the organization is a key way to win (MT2)				.814										.795
Senior managers				.793										.779

retain top talent (RT3)														
No star performer has ever left the company without someone trying to keep them (RT4)					.625									.741
Company performance is reviewed infrequently (CPR1)						.835								.754
Company performance is reviewed only on a success/failure scale (CPR2)						.850								.797

improvements are made only when problems arise. (PPD1)														
Process							.570							.799
improvements are actively sought out for continuous improvement (PPD2)														
Process improvements are a part of normal business processes (PPD3)							.692							.746
In review/performance								.581						.749

meetings the right data or information is														
often not present (CPD1)														
In review/performance meetings discussion overly focuses on data that is not meaningful (CPD2)							.638							.800
In review/performance meetings there is often no clear agenda and the objectives of the							.745							.785

meeting are not clear (CPD3)															
In review/performance meetings discussion drives to the root cause of problems (CPD4)								.550							.768
Review/performance meetings are an opportunity for constructive feedback and coaching (CPD5)								.520							.767
Failure to achieve agreed objectives does not carry any									.683						.646

consequences (CM1)													
Failure to achieve agreed objectives is tolerated for a period before action is taken (CM2)								.748					.709
Failure to achieve agreed objectives leads to retraining in identified areas of weakness (CM3)								.747					.720
Failure to achieve agreed objectives leads to reassignment to other jobs where								.744					.722

skills are more appropriate (CM4)														
The goals set are exclusively financial (CTB1)									.618					.796
The goals include non-financial targets (CTB2)									.601					.719
The goals are a balance of financial and non-financial targets (CTB3)									.698					.845
Senior managers believe that non-financial targets are									.605					.745

more inspiring and challenging than financial targets alone (CTB4)														
Non-financial targets form part of the performance appraisal of top management only (CTB5)									.584					.709
Company goals are based on shareholder value (CT12)									.589					.724
Company goals are clearly cascaded down									.617					.726

to individuals (CTI3)													
Company goals become more specific as they cascade to business units (CTI4)										.601			.726
Company goals ultimately define individual performance expectations (CTI5)										.705			.779
Top management's main focus is on short term targets (CTT1)										.523			.525
Short term goals and long term goals are set independently										.655			.733

and so are not necessarily linked to														
each other (CTT3)														
Long term goals are translated into specific short term targets (CTT4)											.742			.788
Short term targets are a 'staircase' to reach long term goals (CTT5)											.732			.776
People in our firm are rewarded equally irrespective of individual performance												.683		.691

level (RHP1)															
Our company has an evaluation system for the awarding of individual performance (RHP2)													.741		.754
We strive to outperform our competitors by providing ambitious individual stretch targets (RHP3)													.714		.731
Rewards are clearly related to individual performance targets (RHP4)													.705		.733

performance (PHP2)														
Our competitors offer stronger reasons for talented people to join their companies (AHC1)													.663	.607
Rewards and benefits provided by our company are comparable to that offered by others in the sector (AHC2)													.809	.782
We provide rewards and benefits better than our competitors													.751	.792

to encourage talented people to join our company (AHC ₃)															
Eigen Value	23.75	4.80	4.26	3.73	2.95	2.87	2.27	1.65	1.61	1.54	1.40	1.26	1.21	1.15	

6.7 Constraints on Management

The constraints on management construct had a total of eight items asking the respondents about the obstacles to improving management practices. Theoretically the construct had no sub-dimension and was unidimensional in nature. The eight questions were factor analysed using principal component analysis with Varimax rotation. Initially the analysis yielded a single factor solution explaining a total of 64.14% of the variance for the entire set of variables. None of the items were removed. Final values for KMO (> .60) and significance of Bartlett's test for sphericity are reported and they show the suitability of factor analysis. The final factor structure shows 64.14% cumulative percentage of variance which is well above the recommended percentage. Final factor structure was unidimensional. The final set of items with loadings and communalities is shown in Table 6.14.

6. 13: Assumptions for Constraints on Management

KMO	Bartlett's Test	df	Sig	Cumulative % of Variance
.906	1300.310	28	.000	64.14%

6. 14: Component Matrix for Constraints on Management

	Component	Communalities
	1	
Hiring managers with the right skills.	.834	.695
Hiring non-managers with the right skills.	.797	.635
Training and development of existing employees.	.772	.595
Employment laws and regulations.	.831	.656

Trade unions.	.810	.691
Knowing what new management practices to introduce.	.800	.641
Bureaucracy within the organizations.	.824	.678
Obtaining cost-effective management consultancy.	.735	.540
Eigen Value	5.131	
% of Total Variance	64.14	

6.7.1 Confirmatory Factor Analysis

6.8 General Strategy

Exploratory factor analysis revealed a three factor solution for General Strategy. The model consisted of 16 items, five in observation, six in forecasting, and five in participation. The three-factor model was subjected to confirmatory factor analysis. For General Strategy, the results showed a very good fit to a three-factor model: ($\chi^2/df = 142.75/96$ (CMIN = 1.48), SRMR = .04; CFI = .98, TLI = .98, RMSEA = .04. None of the items were removed as part of CFA. Standardized regressions weights and CR values are reported in Table 6.15.

6. 15: Item Loadings for General Strategy

Items	Constructs	Estimate	S. E.	C. R.
NGS7	Forecasting	.826		
NGS8	Forecasting	.819	.058	17.183
NGS9	Forecasting	.907	.064	17.182

NGS10	Forecasting	.892	.073	15.160
NGS11	Forecasting	.740	.070	13.034
NGS12	Forecasting	.700	.072	12.121
NGS13	Participation	.815		
NGS14	Participation	.902	.068	17.285
NGS15	Participation	.888	.068	16.921
NGS16	Participation	.834	.074	15.408
NGS17	Participation	.763	.074	13.566
NGS1	Observation	.746		
NGS3	Observation	.836	.063	16.675
NGS4	Observation	.941	.073	15.740
NGS5	Observation	.900	.073	15.001
NGS6	Observation	.897	.065	14.946

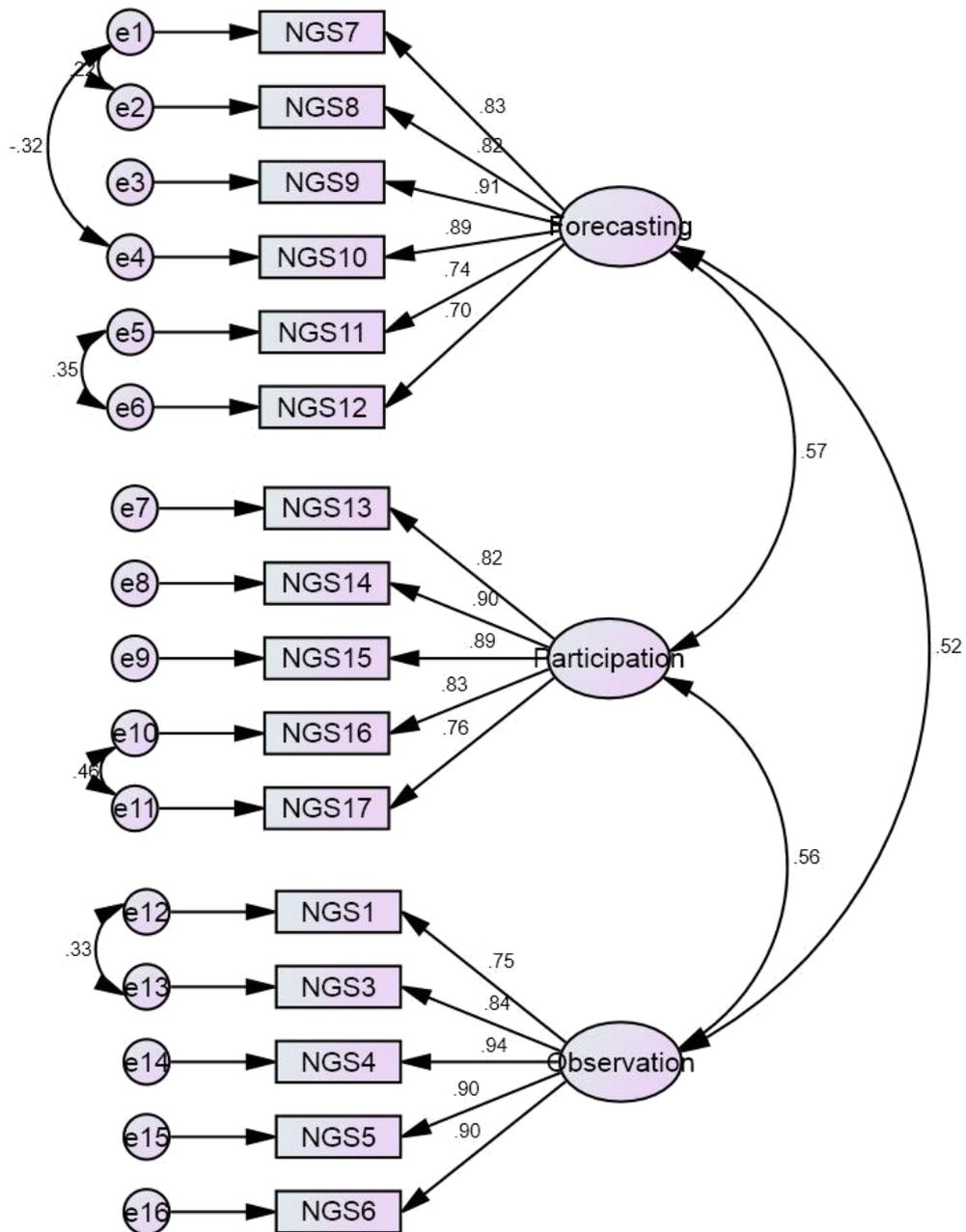


Figure 6. 1: Measurement Model for General Strategy

6.9 Government and Environment

Exploratory factor analysis revealed a three factor solution for the Government and Environment Construct. The model consisted of 15 items, five in business environment, six in government actions, and four in investment and environment. The three-factor model was subjected to confirmatory factor analysis. For Government and Environment, the results showed a good fit to a three-factor

model: ($\chi^2/df = 172.530/82$ (CMIN = 2.104), SRMR = .05; CFI =.96, TLI =.95, RMSEA =.06. None of the items were removed as part of CFA. Standardized regressions weights and CR values are reported in Table 6.16.

6. 16: Item loadings for Government and Environment

Items	Construct	Std. Estimate	S. E.	C. R.
NGA1	Government Actions	.794		
NGA2	Government Actions	.763	.050	19.618
NGA3	Government Actions	.810	.071	13.447
NGA4	Government Actions	.802	.077	12.356
NGA5	Government Actions	.822	.073	13.667
NGA6	Government Actions	.773	.077	12.123
NIE3	Investment and Environment	.708		
NIE4	Investment and Environment	.703	.104	9.346
NIE5	Investment and Environment	.694	.105	9.261
NIE6	Investment and Environment	.760	.104	9.854
NBE1	Business Environment	.638		
NBE2	Business Environment	.666	.097	11.261
NBE3	Business Environment	.894	.116	11.433

NBE4	Business Environment	.910	.115	11.543
NBE5	Business Environment	.804	.121	10.598

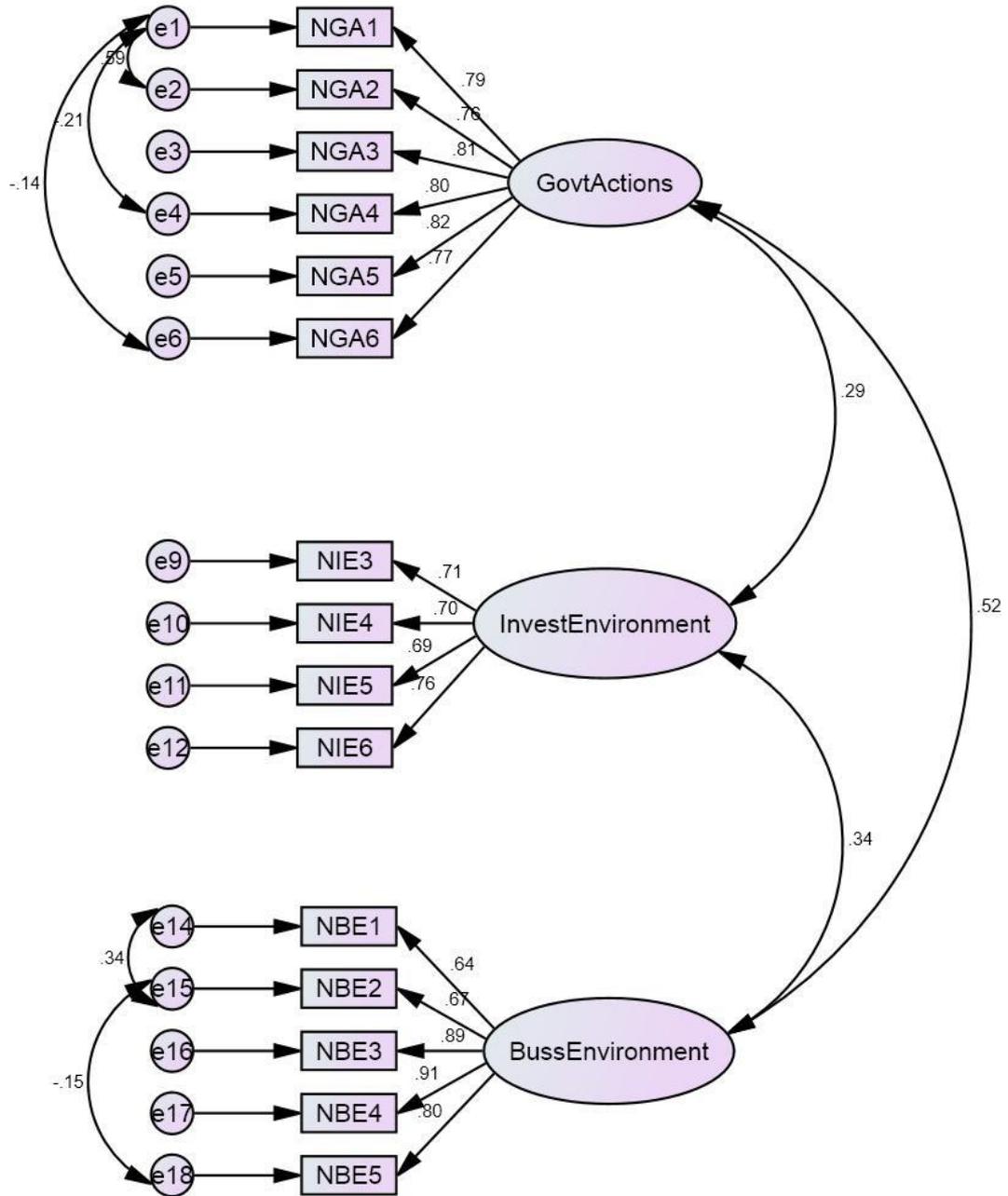


Figure 6. 2: Measurement Model for Government and Environment

6.10 Strategic Foresight

Exploratory factor analysis revealed a single factor solution for Strategic Foresight. The model consisted of 8 items. The single-factor model was subjected to confirmatory factor analysis. For Strategic Foresight, the results showed a very

good fit to a single-factor model: ($\chi^2/df = 27.42/13$ (CMIN = 2.11), SRMR = .02; CFI = .99, TLI = .98, RMSEA = .06. None of the items were removed as part of CFA.

Standardized regressions weights and CR values are reported in Table 6.17.

6. 17: Item Loadings for Strategic Foresight

Items	Construct	Estimate	S. E.	C. R.
NSF1	Strategic Foresight	.856		
NSF2	Strategic Foresight	.856	.048	21.446
NSF3	Strategic Foresight	.754	.052	14.346
NSF4	Strategic Foresight	.859	.058	17.443
NSF5	Strategic Foresight	.818	.059	16.271
NSF6	Strategic Foresight	.865	.052	17.507
NSF7	Strategic Foresight	.817	.056	16.100
NSF8	Strategic Foresight	.676	.051	12.120

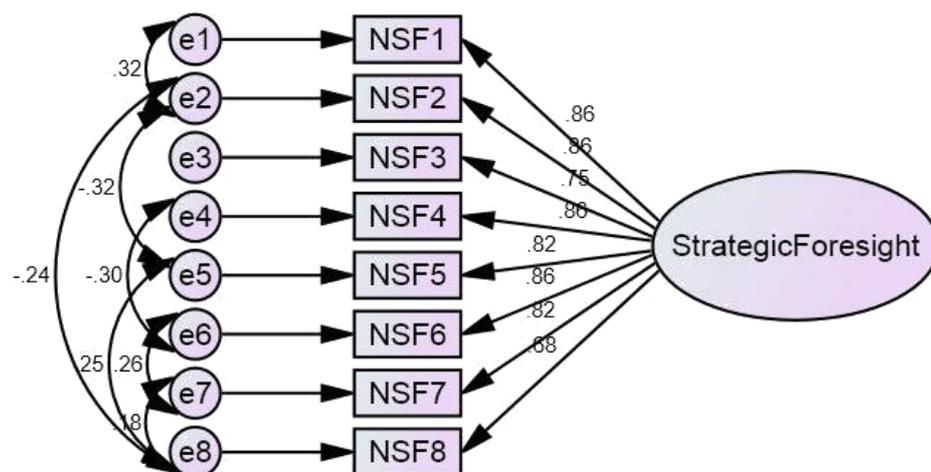


Figure 6. 3: Measurement Model for Strategic Foresight

6.11 Satisfaction with Company Performance

Exploratory factor analysis revealed a single factor solution for Satisfaction with Firm Performance. The model consisted of seven items. The single-factor model was subjected to confirmatory factor analysis. For Satisfaction with Firm Performance, the results showed a very good fit to a single-factor model: ($\chi^2/df = 12.83/9$ (CMIN = 1.42), SRMR = .01; CFI = .99, TLI = .99, RMSEA = .04. None of the items were removed as part of CFA. Standardized regressions weights and CR values are reported in Table 6.18.

6. 18: Item Loadings for Company Performance

Items	Construct	Estimate	S. E.	C. R.
CP1	Company Performance	.834		
CP2	Company Performance	.939	.060	18.669
CP3	Company Performance	.773	.068	14.213
CP4	Company Performance	.752	.072	13.660
CP5	Company Performance	.813	.072	14.405
CP6	Company Performance	.747	.064	13.576
CP7	Company Performance	.701	.064	12.421

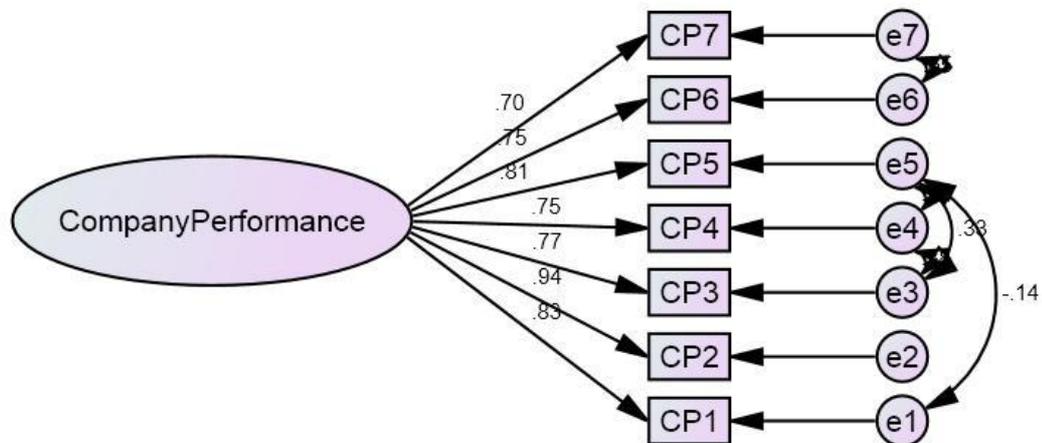


Figure 6. 4: Measurement Model for Company Performance

6.12 Management Techniques

Exploratory factor analysis revealed a two factor solution for Management Techniques. The model consisted of 19 items. The two-factor model was subjected to confirmatory factor analysis. For Management Techniques, the results showed a very good fit to a two-factor model: ($\chi^2/df = 284.04/139$ (CMIN = 2.04), SRMR = .03; CFI = .96, TLI = .96, RMSEA = .06. None of the items were removed as part of CFA. Standardized regressions weights and CR values are reported in Table 6.19.

6. 19: Item Loadings for Management Techniques

Items	Constructs	Estimate	S. E.	C. R.
T1	MgtTechniques1	.810		
T2	MgtTechniques1	.840	.073	15.954
T3	MgtTechniques1	.823	.063	17.605
T4	MgtTechniques1	.792	.070	14.629
T6	MgtTechniques1	.831	.068	15.705
T10	MgtTechniques1	.876	.081	16.993
T11	MgtTechniques1	.807	.074	15.018
T12	MgtTechniques1	.790	.062	14.582
T13	MgtTechniques1	.752	.068	13.569
T14	MgtTechniques1	.804	.063	14.940
T15	MgtTechniques1	.874	.083	16.956
T16	MgtTechniques1	.854	.072	16.353
T17	MgtTechniques1	.813	.075	15.188
T18	MgtTechniques1	.877	.080	17.012

T19	MgtTechniques1	.856	.077	16.391
T20	MgtTechniques1	.797	.063	14.778
T7	MgtTechniques2	.684		
T8	MgtTechniques2	.775	.120	9.877
T9	MgtTechniques2	.717	.150	9.386

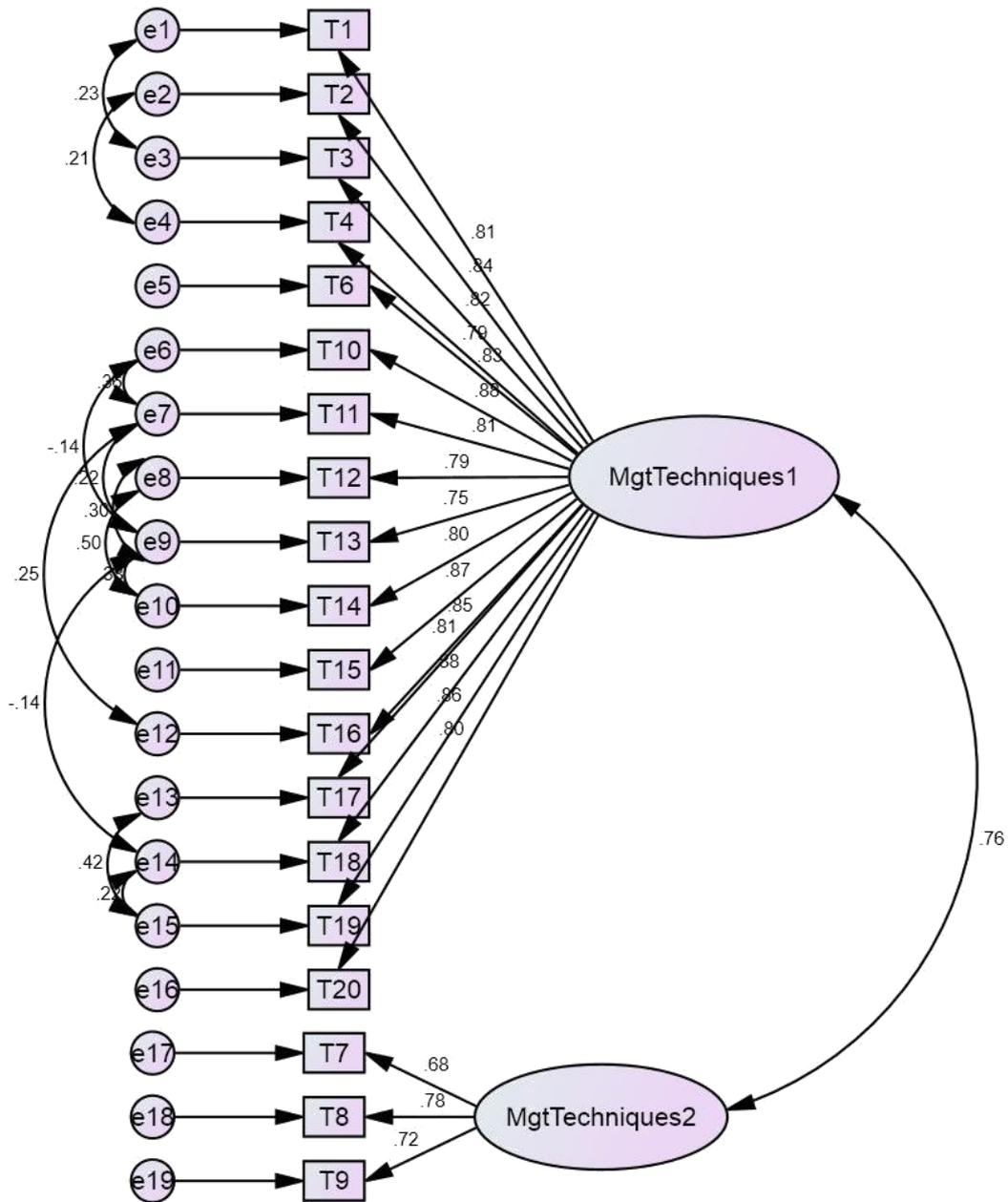


Figure 6. 5: Measurement Model for Management Techniques

6.13 Management Practices

Exploratory factor analysis revealed a 14 factor solution for Management Practices. The 14 factor model was subjected to confirmatory factor analysis. One item (My Company will do whatever it takes to retain top talent (RT3)) was removed from analysis due to low loading (< .60). A total of five items (Review/performance meetings are an opportunity for constructive feedback and coaching (CPD5), The goals set are exclusively financial (CTB1), Company goals ultimately define individual performance expectations (CTI5), Individual performance measures are communicated well (IPC3), and There is a systematic approach to identifying individual performance (RHP6) were removed since they had higher (> 2) standardized residual covariances. For Management Practices, the results showed a mediocre fit to a 14 factor model: ($\chi^2/df = 4999.2/2034$ (CMIN = 2.458), SRMR = .06; CFI = .79, TLI = .77, RMSEA = .07. None of the items were removed as part of CFA. Standardized regressions weights and CR values are reported in Table 6.20.

6. 20: Item Loadings for Management Practices

Items	Constructs	Estimate	S.	C. R.
IPC1	Individual Performance Clarity	.721		
IPC2	Individual Performance Clarity	.736	.096	11.384
IPC4	Individual Performance Clarity	.678	.085	10.463
IPC5	Individual Performance Clarity	.874	.088	13.584
IPC6	Individual Performance Clarity	.882	.082	13.700
IPC7	Individual Performance Clarity	.878	.082	13.651
CPT1	Company Performance Tracking	.784		

CPT2	Company Performance Tracking	.826	.052	19.758
CPT3	Company Performance Tracking	.838	.075	14.567
CPT4	Company Performance Tracking	.852	.070	14.864
CPT5	Company Performance Tracking	.813	.074	14.014
CPT6	Company Performance Tracking	.766	.076	13.007
RPP1	Removing Poor Performers	.819		
RPP2	Removing Poor Performers	.740	.058	15.654
RPP3	Removing Poor Performers	.749	.065	13.032
RPP4	Removing Poor Performers	.870	.064	16.176
RPP5	Removing Poor Performers	.799	.067	14.442
RPP6	Removing Poor Performers	.827	.059	15.158
CTS1	Company Target Stretching	.819		
CTS2	Company Target Stretching	.790	.061	14.079
CTS3	Company Target Stretching	.775	.061	13.707
CTS4	Company Target Stretching	.744	.058	13.013
CTS5	Company Target Stretching	.824	.062	14.908
CTS6	Company Target Stretching	.796	.058	14.194
MT1	Managing and Retaining Talent	.719		
MT2	Managing and Retaining Talent	.866	.084	13.236
MT3	Managing and Retaining Talent	.869	.083	13.375
MT4	Managing and Retaining Talent	.804	.081	12.366
RT1	Managing and Retaining Talent	.688	.082	10.563

RT4	Managing and Retaining Talent			.665	.087	10.056
RHP1	Rewarding	Promoting	High	.727		
	Performance					
RHP2	Rewarding	Promoting	High	.604	.073	10.145
	Performance					
RHP3	Rewarding	Promoting	High	.608	.075	10.213
	Performance					
RHP4	Rewarding	Promoting	High	.879	.077	13.360
	Performance					
RHP5	Rewarding	Promoting	High	.804	.094	12.059
	Performance					
PHP1	Rewarding	Promoting	High	.623	.078	10.461
	Performance					
PHP2	Rewarding	Promoting	High	.759	.072	12.857
	Performance					
CPR1	Company Performance Review			.887		
CPR2	Company Performance Review			.897	.055	19.116
CPR3	Company Performance Review			.735	.054	13.837
CPR4	Company Performance Review			.682	.063	11.033
CPR5	Company Performance Review			.717	.056	13.378
PPD1	Problem Process Documentation			.768		
PPD2	Problem Process Documentation			.948	.077	15.460

PPD3	Problem Process Documentation	.739	.079	12.206
CTT1	Company Target Time	.655		
CTT3	Company Target Time	.819	.109	11.006
CTT4	Company Target Time	.874	.114	11.535
CTT5	Company Target Time	.848	.105	11.294
CM1	Consequence Management	.776		
CM2	Consequence Management	.797	.083	12.033
CM3	Consequence Management	.753	.085	11.397
CM4	Consequence Management	.835	.101	10.407
CTB2	Company Target Balance	.774		
CTB3	Company Target Balance	.824	.079	13.637
CTB4	Company Target Balance	.838	.078	13.894
CTB5	Company Target Balance	.759	.081	12.395
CTI2	Company Target Interconnection	.811		
CTI3	Company Target Interconnection	.796	.085	11.752
CTI4	Company Target Interconnection	.876	.084	13.188
AHC1	Attracting Human Capital	.643		
AHC2	Attracting Human Capital	.810	.106	10.442
AHC3	Attracting Human Capital	.912	.117	10.760
CPD4	Company Performance Dialogue	.738	.085	12.131
CPD3	Company Performance Dialogue	.731	.081	11.988
CPD2	Company Performance Dialogue	.922	.074	15.538

CPD1	Company Performance Dialogue	.773		
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6.14 Constraints on Management

Exploratory factor analysis revealed a single factor solution for Constraints on Management. The model consisted of a total of eight items. The single-factor model was subjected to confirmatory factor analysis. For Constraints on Management, the results showed a very good fit to a single-factor model: ($\chi^2/df = 25.11/15$ (CMIN = 1.67), SRMR = .02; CFI = .99, TLI = .98, RMSEA = .05. None of the items were removed as part of CFA. Standardized regressions weights and CR values are reported in Table 6.21.

6. 21: Item Loadings for Constraints on Management

Items	Construct	Estimate	S. E.	C. R.
CO M1	Constraints on Management	.815		
CO M2	Constraints on Management	.770	.070	13.195
CO M3	Constraints on Management	.734	.070	12.381
CO M4	Constraints on Management	.750	.071	13.100
CO M5	Constraints on Management	.780	.072	13.839
CO	Constraints on Management	.747	.078	12.771

M6				
CO	Constraints on Management	.823	.073	14.249
M7				
CO	Constraints on Management	.686	.065	11.713
M8				

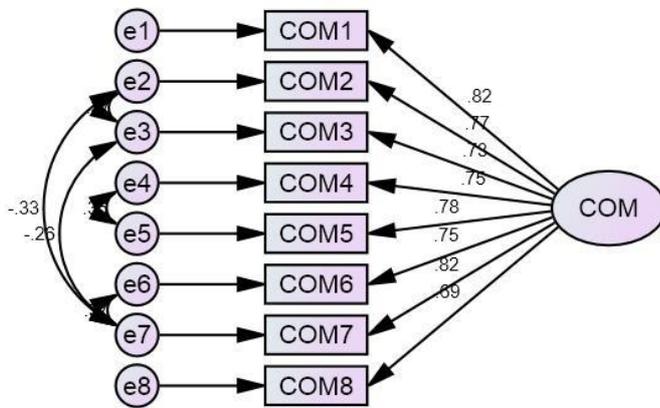


Figure 6. 6: Measurement Model for Constraints on Management

CHAPTER 7

Hypotheses Tests

7.1 Government and Environment and Company Performance

H1: There is a significant impact of Government and Environment on Company Performance

H1a: There is a significant impact of Government Actions on Company Performance

H1b: There is a significant impact of Investment Environment on Company Performance

H1c: There is a significant impact of Business Environment on Company Performance

A structural model was developed to evaluate whether different dimensions of business and environment carry a significant impact on firm performance. The model was subjected to confirmatory factor analysis (see figure 7.1). For structural model evaluating the impact of business environment on firm performance, the results showed a very good fit: ($\chi^2/df = 365.829/193$ (CMIN = 1.895), SRMR = .05; CFI = .95, TLI = .94, RMSEA = .06. None of the items were removed as part of CFA. Overall the results indicate the 48% change in firm performance can be attributed to Business Environment. The results of analyses revealed that government actions does not carry a significant impact on company performance (Std. Est. = -.015, C. R = -.231, $p > .05$) hence, H1a is not supported,

Investment Environment carry a significant impact on company performance (Std. Est. = .546, C. R = 7.105, $p < .001$) hence, H1b is supported, Business Environment carries a significant impact on firm performance (Std. Est. = .286, C. R = 3.964, $p < .001$) hence, H1c is supported.

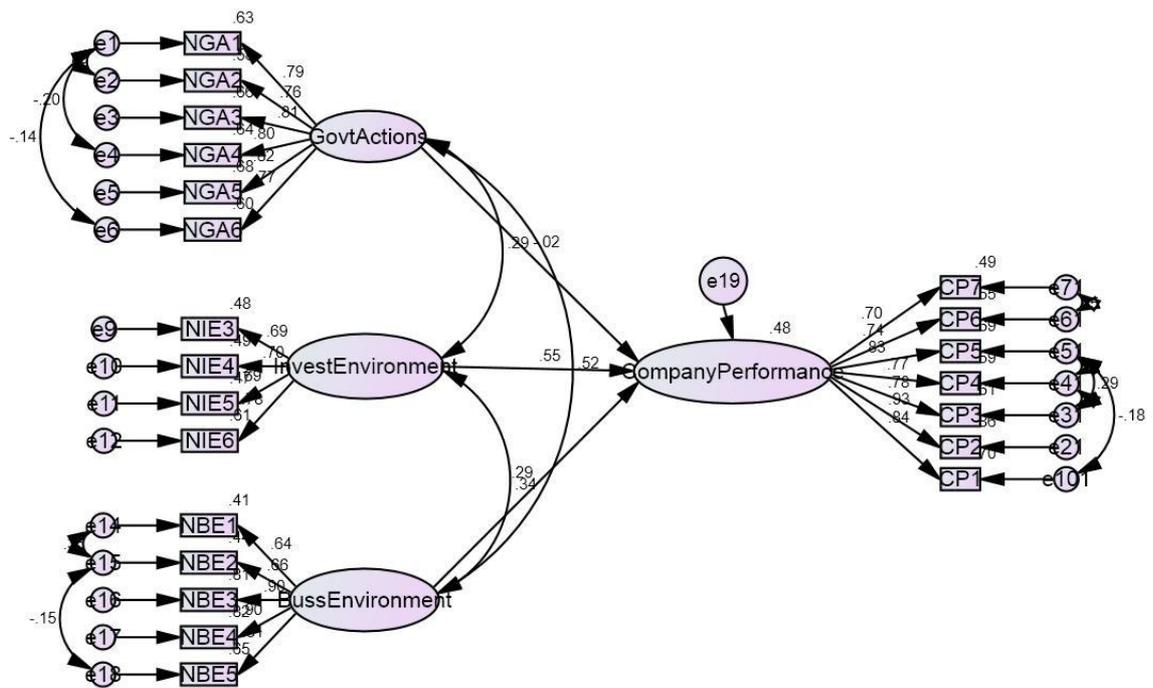


Figure 7. 1: Structural Model: Business Environment and Company Performance

7.2 General Strategy and Satisfaction with Company Performance

H2: There is a significant positive impact of General Strategy on Company Performance

H2a: There is a significant positive impact of Forecast on Company Performance

H2b: There is a significant positive impact of Participation on Company Performance

H2c: There is a significant positive impact of Observation on Company Performance

A structural model was developed to evaluate whether different dimensions of general strategy carry a significant positive impact on firm performance. The model was subjected to confirmatory factor analysis (see figure 7.2). For structural model evaluating the impact of general strategy on firm performance, the results showed a very good fit: ($\chi^2/df = 253.785/214$ (CMIN = 1.186), SRMR = .04; CFI = .99, TLI = .99, RMSEA = .02. None of the items were removed as part of CFA. Overall the results indicate that a 12% change in firm performance can be attributed to general strategy. The results of analyses revealed that forecast does not have a significant impact on company performance (Std. Est. = -.101, C. R = -1.194, $p > .05$) hence, H2a is not supported. Participation has a significant impact on company performance (Std. Est. = .170, C. R = 1.928, $p = .05$) hence, H2b is supported, Observation has a significant impact on firm performance (Std. Est. = .284, C. R = 3.357, $p < .001$) hence, H2c is supported.

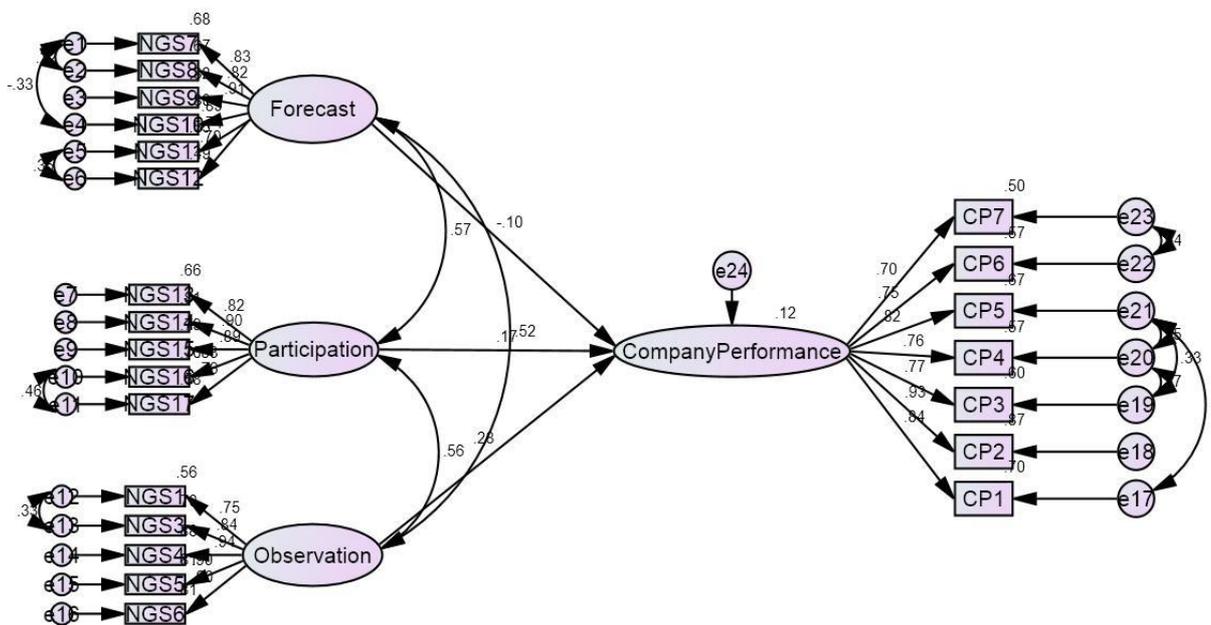


Figure 7. 2: Structural Model: General Strategy and Company Performance

H3: There is a significant positive impact of General Strategy on Financial Performance

A structural model was developed to evaluate whether different dimensions of general strategy have a significant impact on different financial measures. The results of relationship between the general strategy that included three dimensions namely: Forecasting, Participation, and Observation, and financial measures that included Net Profit Net Profit Margin, Gross Profit Margin, EBITDA, Operating Profit Margin, Revenue Growth Rate, Return on Capital Employed ROCE, Return on Equity ROE, Debt to Equity Ratio, Working Capital Ratio, Operating Expense Ratio. The results revealed that some of the dimensions of general strategy have a significant impact on some of the financial measures in the study. The results of hypotheses testing are reported in Table 7.1.

7. 1 Analysis Results: General Strategy and Company Financial Performance

Dependent	Independent	Estimate	C. R.	P	Results
Net Profit	Forecasting	- 227799759.189	-2.224	.026	Supported
Net Profit Margin	Forecasting	-.004	-.143	.886	Rejected
Gross Profit Margin	Forecasting	-.010	-.392	.695	Rejected
Operating Profit Margin	Forecasting	-.008	-.318	.751	Rejected
EBITDA	Forecasting	- 376332040.156	-2.449	.014	Supported
Revenue Growth Rate	Forecasting	-.008	-.182	.855	Rejected
Return on Capital Employed ROCE	Forecasting	-.046	-2.736	.006	Supported
Return on Equity ROE	Forecasting	-.004	-1.649	.099	Rejected
Debt to Equity Ratio	Forecasting	-467.621	-.516	.606	Rejected
Working Capital Ratio	Forecasting	-.092	-.173	.863	Rejected

Operating Expense Ratio	Forecasting	-.004	-.592	.554	Rejected
Net Profit	Participation	- 225999831.878	-1.212	.225	Rejected
Net Profit Margin	Participation	-.044	-.758	.448	Rejected
Gross Profit Margin	Participation	-.024	-.493	.622	Rejected
Operating Profit Margin	Participation	-.043	-.880	.379	Rejected
EBITDA	Participation	- 311302012.726	-1.117	.264	Rejected
Revenue Growth Rate	Participation	.100	1.255	.210	Rejected
Return on Capital Employed ROCE	Participation	.043	1.441	.150	Rejected
Return on Equity ROE	Participation	-.001	-.182	.855	Rejected
Debt to Equity Ratio	Participation	622.544	.376	.707	Rejected
Working Capital Ratio	Participation	.298	.308	.758	Rejected
Operating Expense Ratio	Participation	.018	1.441	.150	Rejected
Net Profit	Observation	386204260.9 03	2.517	.012	Supported
Net Profit Margin	Observation	.040	.866	.387	Rejected
Gross Profit Margin	Observation	.040	1.033	.302	Rejected
Operating Profit Margin	Observation	.045	1.157	.247	Rejected
EBITDA	Observation	587027929.59 0	2.554	.011	Supported
Revenue Growth Rate	Observation	-.036	-.565	.572	Rejected
Return on Capital Employed ROCE	Observation	.028	1.174	.240	Rejected
Return on Equity ROE	Observation	.005	1.255	.209	Rejected

Debt to Equity Ratio	Observation	320.688	.243	.808	Rejected
Working Capital Ratio	Observation	.148	.192	.848	Rejected
Operating Expense Ratio	Observation	-.007	-.698	.485	Rejected

7.3 Strategic Foresight and Satisfaction with Company Performance

H4: There is a significant positive impact of Strategic Foresight on Company Performance

For the structural model evaluating the impact of strategic foresight on company performance, the results showed a very good fit: ($\chi^2/df = 133.428/90$, CMIN = 1.483, SRMR = .04; CFI = .98, TLI = .98, RMSEA = .04). None of the items were removed as part of CFA. Overall the results indicate that a 5% (Square Multiple Correlation) change in company performance can be attributed to strategic foresight (see figure 7.3). The results of analysis revealed that strategic foresight has a significant impact on company performance (Std. Est. = .228, C.R = 3.370, $p < .001$), hence, H4 is supported. Additionally, the results revealed that Family Members as CEO as control variable does not confound the relationship between Strategic Foresight and Firm Performance.

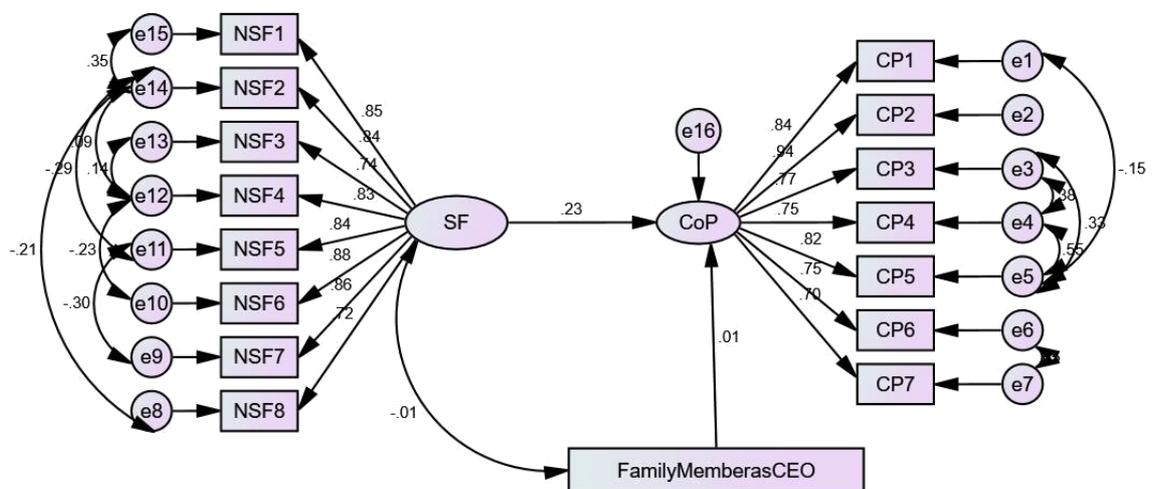


Figure 7. 3: Structural model: Strategic foresight and company performance

7.3.1 Moderation Analysis

H4a: The number of international competitors positively moderates the relationship between strategic foresight and organizational performance, i.e. the greater the number of international competitors the stronger will be the relationship between strategic foresight and organizational performance.

H4b: The level of international sales positively moderates the relationship between strategic foresight and organizational performance, i.e. the greater the level of international sales the stronger will be the relationship between strategic foresight and organizational performance.

The number of international competitors (INT_COMP) and strategic foresight (SF) were used to predict organizational performance (OP). Data were checked for outliers and assumptions of regression, and no violations were found. The PROCESS plug-in (Hayes, 2017) was used to centre variables, and analyse the interaction between SF and INT_COMP predicting OP.

The overall model of INT_COMP and SF and CP was fit, $F(3, 246) = 3.97, p < .001$, $R^2 = .06$. The results of the study indicated that organizations can increase their CPs by SF ($b = .32, t = 2.60, p < .01$). However, the results showed non-significant negative impact of INT_COMP on CP ($b = -.0012, t = -1.23, p > .05$). Furthermore, the results also showed non-significant interaction effect of SF and INT_COMP on CP ($b = -.0018, t = -.86, p = .39$).

The results further explained the conditional effect of Strategic Foresight on Firm Performance at different values of the INT_COMP (moderator). The results revealed that for moderate and lower values of INT_COMP there was a significant effect of Strategic Foresight on Firm Performance, whereas, for high values of

INT_COMP there was an insignificant effect of Strategic Foresight on Firm Performance (see Table 7.2).

7. 2 Conditional effect of SF on OP at values of the moderator (International Competitors)

Int_Comp	Effect	se	T	p	LLCI	ULCI
-58.0546	.4313	.1464	2.949	.0035	.1428	.7197
.0000	.3284	.1263	2.6008	.0099	.0797	.5771
58.0546	.2255	.1973	1.1428	.2542	-.1631	.6141

International sales (SALES_IN) and strategic foresight (SF) were used to predict CP. Data were checked for outliers and assumptions of regression, and no violations were found. The PROCESS plug-in (Hayes, 2013) was used to centre variables, and analyse the interaction between SF and SALES_IN predicting CP.

The overall model of SALES_IN and SF and CP was fit, $F(3, 246) = 3.30, p < .05, R^2 = .06$. The results of the study indicated that organizations can increase their CPs by SF ($b = .31, t = 2.64, p < .01$). However, the results showed non-significant impact of SALES_IN on CP ($b = .0114, t = 1.405, p > .05$). Furthermore, the results also showed non-significant interaction effect of SF and SALES_IN on CP ($b = -.0228, t = -1.26, p = .21$).

The results further explained that the conditional effect of SF on CP at different values of the SALES_IN (moderator). The results revealed that for moderate and lower values of SALES_IN there was a significant effect of SF on CP, whereas, for

high values of SALES_IN there was an insignificant effect of SF on CF (see Table 7.3).

7.3 Conditional effect of SF on OP at values of the moderator (International Sales)

Sales_In	Effect	se	T	p	LLCI	ULCI
-7.4162	.4808	.1775	2.7093	.0072	.0072	.1313
.0000	.3115	.1181	2.6375	.0089	.0089	.0789

Overall, the moderation effect of the number of international competitors is non-significant. However, the conditional effects of the moderator vary at different values on the relationship between NSF and CP. Figure 7.4, illustrates that when there are low numbers of international competitors there is a stronger relationship between NFS and CP. Whereas, with higher numbers of international competitors, there is a weaker relationship between NSF and CP.

Figure 7.4: Moderation at different values of international competitors (IC) (At Lower Level of IC: Blue, At Middle level of IC: Green, At Higher level of IC: Brown)

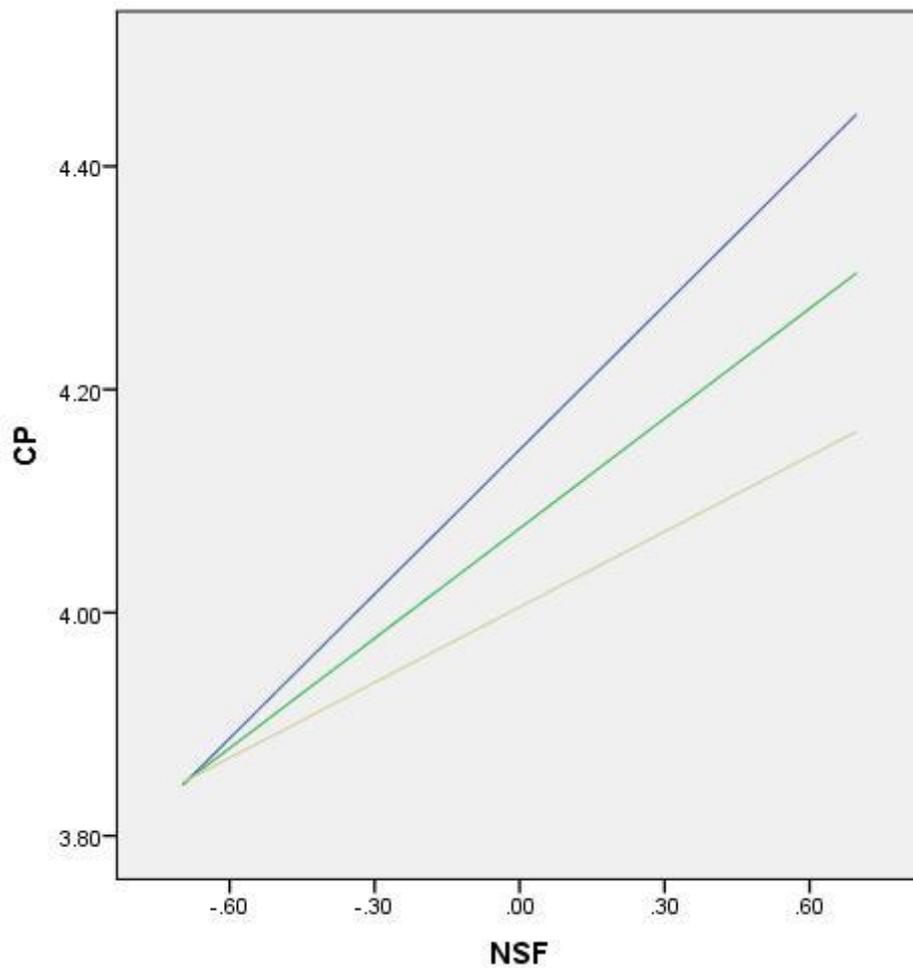


Figure 7. 4: Moderation at different values of international competitors (IC) (At Lower Level of IC: Blue, At Middle level of IC: Green, At Higher level of IC: Brown)

Overall, the moderation effect of international sales is non-significant. However, the conditional effects of the moderator vary at different values of the relationship between NSF and CP. Figure 7.4 illustrates that at lower values of international sales there is a stronger relationship between NSF and CP than at higher values of international sales.

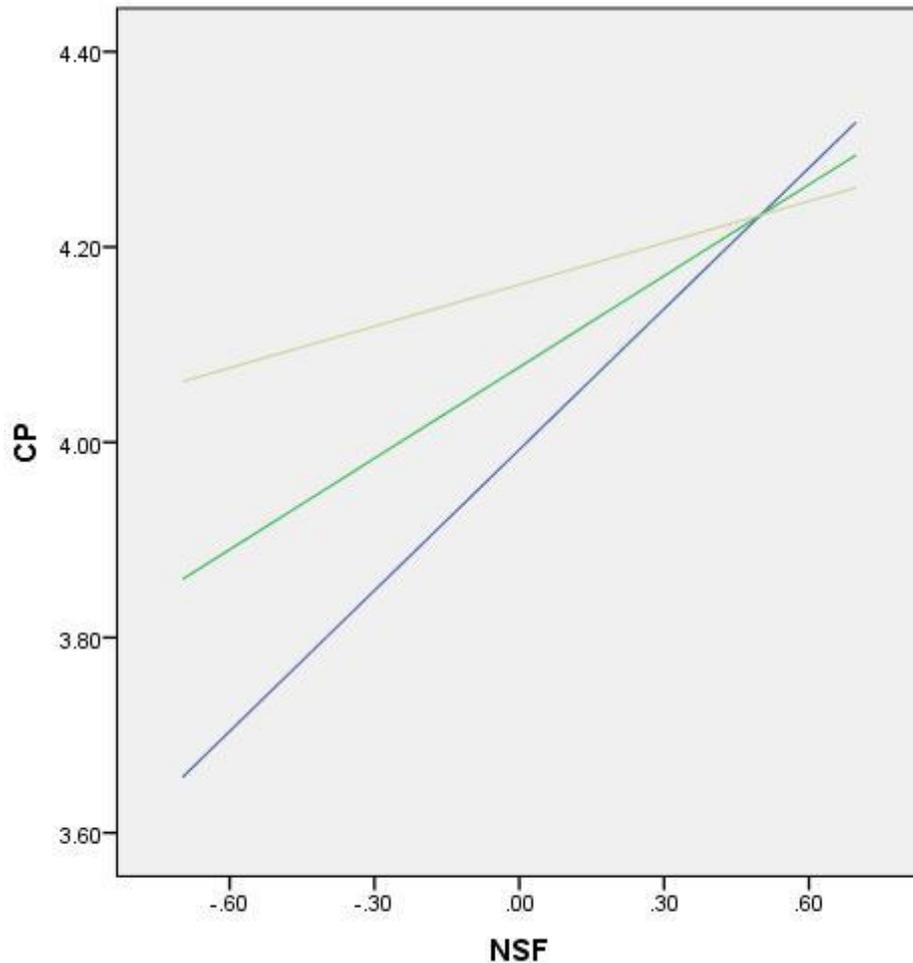


Figure 7. 5: Moderation at different values of International Sales (IS) (At Lower Level of IS: Blue, At Middle level of IS: Green, At Higher level of IS: Brown)

H5: There is a significant positive impact of Strategic Foresight on Financial Performance on Textile Companies

A structural model was developed to evaluate whether strategic foresight has a significant impact on financial performance of the textile firms in the study. The effect was assessed only on those firms where objective data was available. The financial performance was measured through different measures. Effect of Strategic Foresight was assessed on each of the different measures of financial performance. The model was subjected to confirmatory factor analysis. The results of the relationship between strategic foresight and financial measures that included Net Profit, Net Profit Margin, Gross Profit Margin, EBITDA, Operating

Profit Margin, Revenue Growth Rate, Return on Capital Employed ROCE, Return on Equity ROE, Debt to Equity Ratio, Working Capital Ratio, Operating Expense Ratio. The results revealed that Strategic Foresight did not have a significant impact on any of the financial measures. The results of hypotheses testing are reported in Table 7.4.

7. 4: Analysis Results: Strategic Foresight and Company Financial Performance

	Estimate	S. E.	C. R.	P
Net Profit	1132750.987	86171819.401	.013	.990
Net Profit Margin	-.001	.025	-.037	.971
Gross Profit Margin	.005	.021	.225	.822
EBITDA	11038055.209	129672992.017	.085	.932
Operating Profit Margin	-.004	.021	-.181	.856
Revenue Growth Rate	.043	.035	1.220	.222
Return on Capital Employed ROCE	.020	.014	1.444	.149
Return on Equity ROE	.001	.002	.515	.606
Debt to Equity Ratio	-203.178	727.507	-.279	.780
Working Capital Ratio	.250	.425	.588	.557
Operating Expense Ratio	.006	.006	1.161	.246

It is worth noting that where the study found a significant impact of strategic foresight on subjective firm performance (H4), the results of impact of strategic foresight on firm financial performance were completely contradictory. In this

case strategic foresight did not have any effect on any for the financial measures of the firm. Hence, H5 was not supported.

7.4 Management Techniques and Satisfaction with Company Performance

H6: There is a significant positive impact of Management Techniques on Company Performance

H6a: There is a significant positive impact of Management Techniques 1 on Company Performance

H6b: There is a significant positive impact of Management Techniques 2 on Company Performance

A structural model was developed to evaluate whether management techniques carry a significant impact on firm performance. The model was subjected to confirmatory factor analysis (see figure 7.6). For structural model evaluating the impact of management techniques on firm performance. Management Techniques in exploratory factor analysis revealed two factors, Management Techniques 1 and Management Techniques 2. The results showed a very good fit: ($\chi^2/df = 562.168/286$ (CMIN = 1.966), SRMR = .04; CFI = .95, TLI = .95, RMSEA = .06. None of the items were removed as part of CFA. Overall the results indicate that a 40% change in firm performance can be attributed to strategic foresight. The results of analyses revealed that Management Techniques 1 carry a significant impact on company performance (Std. Est. = .522, C. R = 5.090, $p < .001$), hence, H6a is supported. While Management Techniques 2 did not significantly impact company performance (Std. Est. = .141, C. R = 1.321, $p > .05$), hence, H6b is not supported.

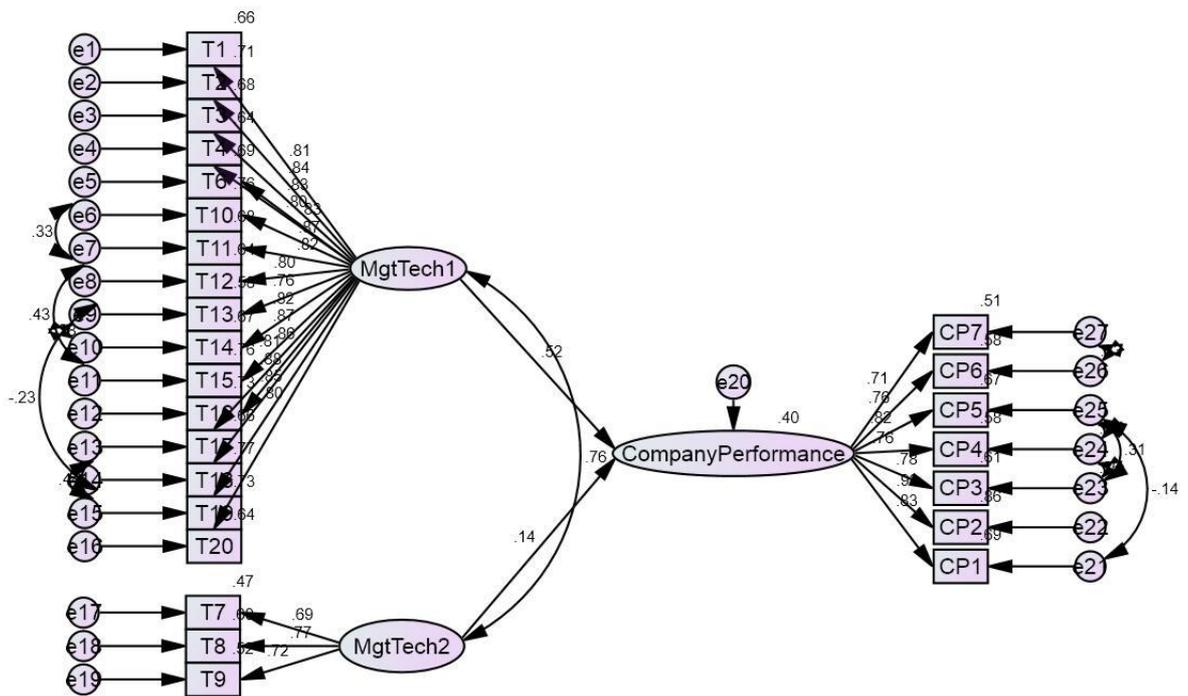


Figure 7. 6: Structural Model: Management Techniques and Company Performance

7.5 Management Practices and Company Performance

H7: There is a significant positive impact of Management Practices on Company Performance

A structural model was developed to evaluate whether different management practices carry a significant impact on firm performance. The model was subjected to confirmatory factor analysis. Management Practices in exploratory factor analysis revealed 14 different factors, namely; Individual Performance Clarity, Company Performance Tracking, Removing Poor Performers, Company Target Stretching, Managing and Retaining Talent, Rewarding Promoting High Performance, Company Performance Review, Problem Process Documentation, Company Performance Dialogue, Company Target Time, Consequence Management, Company Target Balance, Company Target Interconnection, Attracting Human Capital, and Company Performance Dialogue.

The results showed a mediocre fit: ($\chi^2/df = 6450.5/2502$ (CMIN = 2.578), SRMR = .06; CFI = .77, TLI = .75, RMSEA = .08. None of the items were removed as part of CFA. The results of analyses revealed that Individual Performance Clarity, Company Performance Review, Problem Process Documentation, Company Performance Dialogue, and Attracting human capital had a significant impact on company performance ($p < .05$). Removing Poor performance and Managing and Retaining talent partially influenced the performance ($p < .10$) while all other variables had an insignificant impact on company performance.

7. 5: Management Practices and Company Performance

Hypotheses	Independent Variable	Std. Est	C. R.	P	Results
H7a	Individual Performance Clarity (IPC)	.152	2.307	.021	Supported
H7b	Company Performance Tracking (CPT)	-.047	-.669	.503	Rejected
H7c	Removing Poor Performers (RPP)	.124	1.790	.073	Partially Supported
H7d	Company Target Stretching (CTS)	-.101	-1.225	.220	Rejected
H7e	Managing and Retaining Talent (MTT)	.091	1.788	.074	Partially Supported
H7f	Rewarding and Promoting High	-.044	-1.178	.239	Rejected

	Performance					
H7g	Company Performance Review (CPR)	-0.133	-2.974	.003	Supported	
H7h	Problem Process Documentation (PPD)	1.181	10.006	***	Supported	
H7i	Company Performance Dialogue (CPD)	-0.290	-3.015	.003	Supported	
H7j	Company Target Time CTT	-0.015	-0.253	.800	Rejected	
H7k	Consequence Management CM	-0.033	-0.843	.399	Rejected	
H7l	Company Target Balance CTB	.016	.252	.801	Rejected	
H7m	Company Target Interconnection CTI	.010	.218	.827	Rejected	
H7n	Attracting Human Capital AHC	.105	2.380	.017	Supported	

Note: DV: Company Performance, *** refers to P-Value less than .001

Additionally, comparing the significance of management practices on organizational performance in firms with CEO as family member with non-family member as CEO revealed that in firms where the CEO was a non-family member, Attracting Human Capital and Individual performance clarity had a significant impact on organizational performance.

In firms with a family member as CEO, removing poor performers, Managing Talent, and Problem Process Documentation, had a significant impact on company performance. The impact of company performance review was negative and significant at ($p < .10$). The impact of company performance dialogue and company target interconnection was found significant in family member as CEO, but it was negative. The results show that with companies having family member as CEO, there is a greater number of management practices significantly influencing the company performance.

7. 6: Comparison of Impact of Management Practices on Company Performance between Family Member as CEO and Non-Family Member as CEO

	Non - Family Member as CEO				Family Member as CEO			
	Estimate	S.E.	C.R.	P	Estimate	S.E.	C.R.	P
AHC	.286	.148	2.158	.031	.074	.058	1.025	.305
CTS	.472	.615	.875	.382	-.274	.161	-1.575	.115
CTT	-.768	1.060	-1.119	.263	.056	.181	.330	.741
RHP	-.192	.244	-.867	.386	-.093	.214	-.532	.595
RPP	-.382	.375	-1.325	.185	.222	.106	2.057	.040
RT	.326	.742	.511	.609	-.232	.161	-1.516	.130
PHP	-.144	.471	-.363	.717	.084	.191	.478	.633
MT	-.494	.721	-.827	.408	.332	.157	2.376	.017
IPC	.480	.244	2.063	.039	.221	.193	1.472	.141
PPD	.602	.568	1.316	.188	1.193	.186	7.201	.000
CPT	.166	.194	.836	.403	.069	.190	.460	.646
CPR	-.177	.134	-1.482	.138	-.152	.068	-1.792	.073

CPD	.511	.667	.875	.381	-.418	.157	-3.069	.002
CM	-.022	.141	-.148	.882	.060	.055	.953	.341
CTB	.358	.235	1.570	.116	-.046	.112	-.402	.687
CTI	-.015	.103	-.128	.898	-.161	.066	-2.175	.030

7.6 Constraints on Management and Company Performance

H8: There is a significant impact of Constraints on Management on Company Performance

A structural model was developed to evaluate whether constraints on management carry a significant impact on firm performance. The model was subjected to confirmatory factor analysis (see figure 7.7). For structural model evaluating the impact of constraints on management on firm performance, the results showed a very good fit: ($\chi^2/df = 104.416/67$ (CMIN = 1.55), SRMR = .04; CFI=.98, TLI = .98, RMSEA = .04. None of the items were removed as part of CFA. Overall the results indicate the 10% change in firm performance can be attributed to constraints on management. The results of analyses revealed that constraints on management carry a significant impact on company performance (Std. Est. =.316, C. R = 4.615, $p < .001$), hence, H8 is supported.

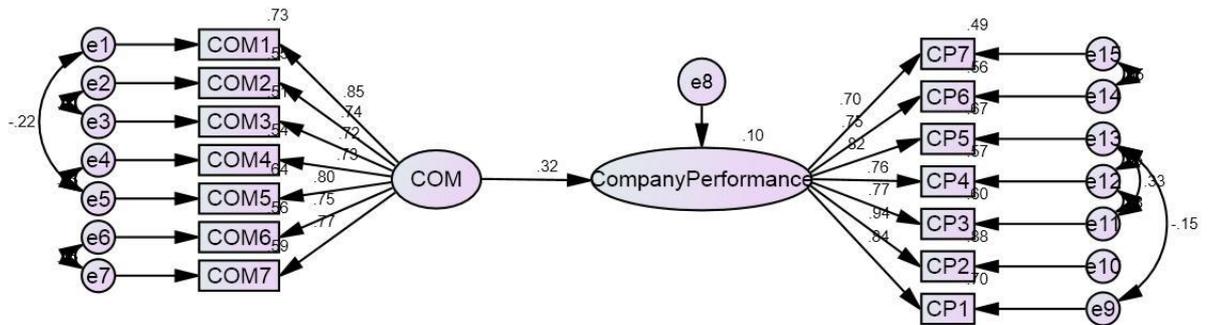


Figure 7. 7: Structural Model – Constraints on Management and Company Performance

7.7 Government and Environment and General Strategy

H9: There is a significant impact of Government and Environment on General Strategy

A structural model was developed to evaluate whether different dimensions of business and environment carry a significant impact on different dimensions of general strategy. The model was subjected to confirmatory factor analysis (see figure 7.8). For the structural model evaluating the impact of business and environment on dimensions of general strategy, the results showed a good fit since except for SRMR all indices fell well within the specified range for good fit: ($\chi^2/df = 738.809/412$ (CMIN = 1.793), SRMR = .15; CFI = .94, TLI = .93 RMSEA = .05. None of the items were removed as part of CFA. The results of relationship between the constructs and their significance is reported in Table 7.7.

7. 7: Analysis Results: Business Strategy and General Strategy

	Dependent	Independent	Estimate	S. E.	C. R.	P	Results
H9a	Forecasting	Government Actions	-.174	.072	-2.098	.036	Supported
H9b	Participation	Government Actions	-.212	.062	-2.565	.010	Supported
H9c	Observation	Government Actions	-.286	.059	-3.426	***	Supported
H9d	Forecasting	Investment &Environment	.063	.099	.811	.417	Rejected
H9e	Participation	Investment &Environment	.201	.086	2.540	.011	Supported
H9f	Observation	Investment	.120	.079	1.551	.121	Rejected

		&Environment					
H9g	Forecasting	Business Environment	.211	.104	2.462	.014	Supported
H9h	Participation	Business Environment	.226	.089	2.655	.008	Supported
H9i	Observation	Business Environment	.250	.084	2.927	.003	Supported

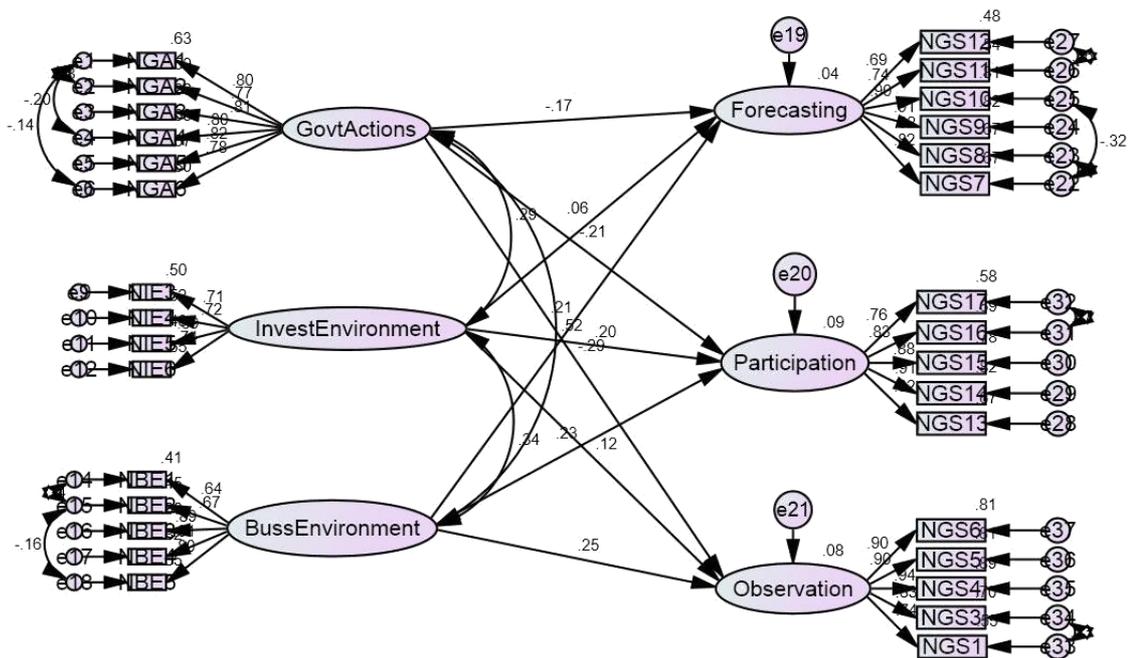


Figure 7. 8: Structural Model – Business Environment and General Strategy

7.8 Government and Environment and Strategic Foresight

H10: There is a significant impact of Government and Environment on Strategic Foresight

H10a: There is a significant impact of Government Actions on Strategic Foresight

H10b: There is a significant impact of Investment Environment on Strategic Foresight

H10c: There is a significant impact of Business Environment on Strategic Foresight

A structural model was developed to evaluate whether different dimensions of business and environment carry a significant impact on Strategic foresight. The model was subjected to confirmatory factor analysis (see figure 7.9). For the structural model evaluating the impact of business and environment on strategic foresight, the results showed a very good fit: ($\chi^2/df = 368.824/234$ (CMIN = 1.566), SRMR = .04; CFI = .96, TLI = .96, RMSEA = .04. None of the items were removed as part of CFA. Overall the results indicate that a 5% change in strategic foresight can be attributed to business environment. The results of analyses revealed that Government Actions does carry a significant impact on strategic foresight (Std. Est. = -.180, C. R = -2.194, $p < .05$), hence H10a is supported, Investment Environment has an insignificant impact on strategic foresight (Std. Est. = .119, C. R = 1.532, $p > .05$), hence H10b is not supported, Business Environment has a significant impact on strategic foresight (Std. Est. = .192, C. R = 2.275, $p < .05$), hence H10c is supported.

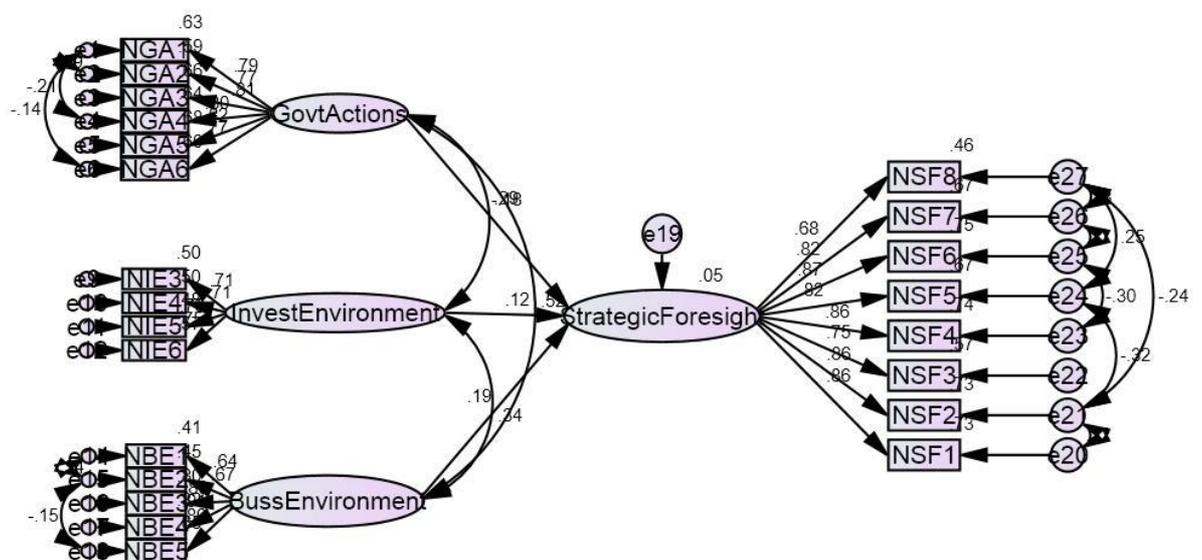


Figure 7. 9: Structural Model – Business Environment and Strategic Foresight

7.9 Constraints on Management and Strategic Foresight

H11: There is a significant impact of constraints on management on strategic foresight

A structural model was developed to evaluate whether constraints on management carry a significant impact on strategic foresight. The model was subjected to confirmatory factor analysis (see figure 7.10). For the structural model evaluating the impact of constraints on management on strategic foresight, the results showed a very good fit: ($\chi^2/df = 220.964/98$ (CMIN = 2.255), SRMR = .04; CFI = .95, TLI = .94, RMSEA = .07. None of the items were removed as part of CFA. Overall the results indicate that a 15% change in firm performance can be attributed to constraints on management. The results of analyses revealed that constraints on management carry a significant impact on strategic foresight (Std. Est. = .394, C. R = 5.887, $p < .001$), hence, H11 is supported.

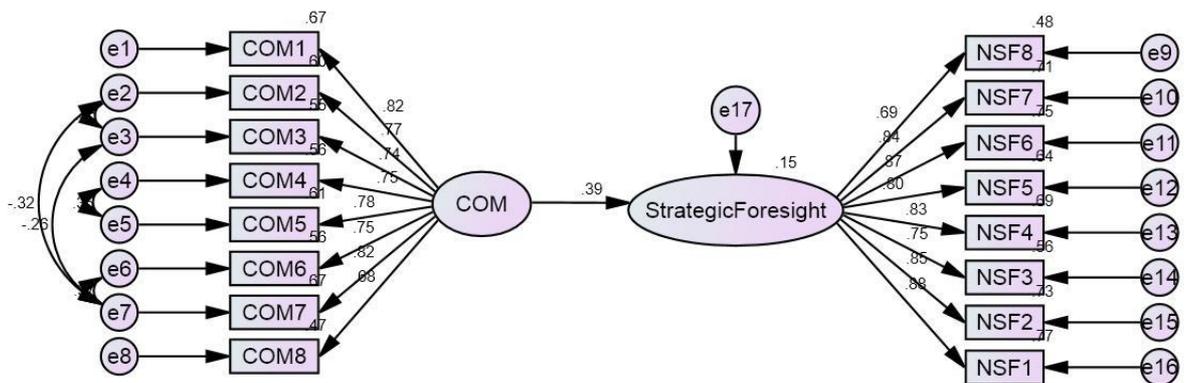


Figure 7. 10: Structural Model – Constraints on Management and Strategic Foresight

7. 8: Hypotheses Summary

Hypotheses	STATEMENT	RESULTS
H1	There is a significant impact of government and environment on firm performance	Supported

H1a	There is a significant impact of government actions on firm performance	Not Supported
H1b	There is a significant impact of investment environment on firm performance	Supported
H1c	There is a significant impact of business environment on firm performance	Supported
H2	There is a significant positive impact of general strategy on firm performance	Supported
H2a	There is a significant positive impact of forecasting on firm performance	Not Supported
H2b	There is a significant positive impact of participation on firm performance	Supported
H2c	There is a significant positive impact of observation on firm performance	Supported
H3	There is a significant positive impact of general strategy on financial performance	Partially Supported
H4	There is a significant positive impact of strategic foresight on firm performance	Supported
H4a	The number of international competitors positively moderates the relationship between strategic foresight and organizational performance, i.e. the greater the number of international competitors the stronger will be the relationship between strategic foresight and organizational performance.	Not Supported
H4b	The level of international sales positively moderates the relationship between strategic foresight and organizational performance, i.e. the greater the level of international sales the stronger will be the relationship between strategic foresight and organizational performance.	Not Supported
H5	There is a significant positive impact of strategic foresight on financial performance	Not Supported
H6	There is a significant positive impact of management techniques on firm performance	Supported
H6a	There is a significant positive impact of Management Techniques 1 on Firm Performance	Supported
H6b	There is a significant positive impact of Management Techniques 2 on Firm Performance	Not Supported
H7	There is a significant positive impact of management practices on firm performance.	Partially Supported
H8	There is a significant impact of constraints on management on firm performance	Supported
H9	There is a significant impact of government and environment on general strategy	Supported

H10	There is a significant impact of government and environment on strategic foresight	Supported
H10a	There is a significant impact of government actions on strategic foresight	Supported
H10b	There is a significant impact of investment environment on strategic foresight	Not Supported
H10c	There is a significant impact of business environment on strategic foresight	Supported
H11	There is a significant impact of constraints on management on strategic foresight	Supported

CHAPTER 8

Summary and Conclusions

8.1 Summary and Conclusions

The result of the study revealed that there is a significant and positive impact of Business Environment on Pakistani textile firm performance. This result is in line with prior studies. For example, Prajogo (2016) confirmed that the firm's dynamic and competitive environments strengthen the effect of product/ process innovation on business performance in the context of Australian manufacturing firms. In addition, the results revealed that government actions do not carry a significant impact on company performance. This finding is aligned with the prior studies of (Hafeez, 2013; Korai, Mahar and Uqaili; 2017) who found that the effects of government rules and regulations were ineffective in improving firm performance.

There might be several reasons for this insignificant result. For example, according to Korai et al. (2017) Pakistan has developed laws, established government agencies and accepted technical assistance from donors, such as the World Bank, in order to respond to environmental problems. Despite that, the response remains fragmented and environmental laws, regulations and other initiatives have not solved the problem (Korai, Mahar and Uqaili; 2017). Moreover, Hafeez (2013) reported that there is a plethora of regulations in Pakistan, but their

application is still far from becoming a reality for the country as they are only at the implementation stages. The non-conformance to governmental reregulation may cause this insignificant effect.

Investment Environment and Business Environment have a significant impact on company performance. These results also support prior studies. For example, those organizations which address environmental issues promptly can affect the marketability of their products, their competitive position and maximize their financial performance (Post and Altman, 1992; Billing and Scott, 1995). Moreover, Ejdys (2013) stated that project managers should adopt a passive attitude, past practices and shape their future to take advantage of upcoming opportunities in the environment.

The result showed that there is a significant and positive impact of general strategy on firm performance. The first empirical test of the relationship between general strategy and firm performance was conducted by Thune and House (1970), who reported better economic performance by groups of formal strategic planners as compared to non-planners. In addition, the prescriptive general strategic management literature implies that there is a positive association between strategic planning and company performance (Greenley, 1994). Capon et al. (1994) argue that the greater the degree of sophistication of the strategy planning process, the better the performance of the organization.

The results revealed that the variable Forecast does not have a significant impact on company performance. Strategic foresight enhanced the firm's performance in different ways. For example, it explored future opportunities so as to set priorities for investment in science and innovation activities, reorienting the firms science and innovation system, demonstrating the vitality of the science and

innovation system, bringing new actors into the strategic debate, building new networks and linkages across fields, sectors and markets or around problems (Georghiou & Keenan, 2006). Similarly, the foresight process involves “intense iterative periods of open reflection, networking, consultation and discussion, leading to the joint refining of future visions and the common ownership of strategies, with the aim of exploiting long term opportunities opened up through the impact of science, technology and innovation on society” (Harper, 2003). However, negligence in handling of proper strategic foresight planning could leads to negative effect as reflected in this study.

Participation and Observation has a significant impact on firm performance. This finding also supports prior studies. For example, Ejdys (2013) highlighted the importance of observation and participation. Accordingly, Ejdys (2013) noted that participation of the most important stakeholders and decision-makers has a positive impact on the perceived quality of the decision-making process in firm. Also, organizations evolve different approaches in order to ensure long term competitive advantages, which includes (i) the need to integrate multiple approaches (ii) ensuring the participation of key stakeholders and decision makers (iii). Operating under the conditions of environmental uncertainty (iv) taking into account the relationship between the factors affecting the organization, such as the market, technological, social, legal, and economic factors (Heger and Rohrbeck, 2012).

The results revealed that some of the dimensions of general strategy have a significant impact on some of the financial measures. General strategy impacts positively on firm performance with respect to net profit, EBITDA, and Return on Capital Employed (ROCE). This finding also supports prior literature. For example,

Saeidi et al. (2015) highlighted that different general strategies, such as competitive advantages, reputation and customer satisfaction, should be given appropriate attention by firms in order to enhance their performance. Moreover, from the view point of financial advantage, Kotha, Rindova, and Rothaermel (2001) and Roberts and Dowling (2002) found that firms focusing on strategy such as higher reputation enjoy higher sales growth and higher return on assets (ROA).

In the context of Pakistan and its textile sector, strategic foresight has a significant proactive capability. This could be developed by organizations as a higher order competency to identify and address new business and competitive opportunities in an uncertain national, regional and global environment through long term strategic foresight-based decision making. The study found a significant positive relationship between strategic foresight and performance. Strategic foresight facilitates these organizations in responding to opportunities and helps them restructure their processes and structures so that they are able to capture and take full advantage of these new opportunities (Dvir et al., 1993; Veliyath & Shortell, 1993). Additionally, the study found that Family Ownership as CEO does not have any confounding effect on the relationship between strategic foresight and performance. The finding of not significant impact of the control variable is inconsistent with prior studies that found a significant role of family ownership in performance related studies (see Anderson & Reeb, 2003; Villalonga & Amit, 2006). This contradictory finding calls for further research in this area. The environmental scanning process embedded in strategic foresight provides organizations with a framework for identifying early warnings, developing mental models to respond to these warnings, devising strategies and strategic plans to address efficiently the possible innate complexities in these warnings, and

creating sound metrics for monitoring the actions taken (Courtney, 2001; Fink et al., 2005; Makridakis, 1990; Schoemaker, 2012). The study analyses how organizations in the Pakistan textile industry strategize to achieve competitiveness, in the face of competitive pressures present and future, through strategic foresight processes. The research further explores whether strategic foresight can make a difference in the competitiveness of the textile organizations in Pakistan.

The study also assessed the moderating role of international competitors and international sales on the relationship between strategic foresight and organizational performance. Contrary to previous studies (Krist, 2009; Chakrabarty & Wang, 2013), the findings revealed that neither the number of international competitors nor the size of international sales play any significant role as moderators. Hence both H4a and H4b were not supported. The possible reasons could be that the respondents are from the same market and there are a similar number of competitors who are involved in international sales. These findings invite further investigation because the firms should be adaptive to change (Anderson, 1999) and therefore strategic foresight should play a vital role in environmental scanning and preparing for the future, and hence leading to enhanced organizational performance at increased levels of international sales.

Prior literature indicates that strategic foresight can create competitive advantage and its understanding is essential for policy makers. Both management literature and practice has shown the importance of strategic foresight in enhancing organisational performance, since strategic foresight allows a firm to navigate successfully complex, uncertain and volatile environments, allowing a firm to enhance their capability and thus their competitive advantage. This study is based

on textile firms in Pakistan, a country which is an under researched area. Considering the uncertain and turbulent environment in Pakistan, this research site provides an opportunity to make a significant contribution to extant literature. This study presents an original and conceptually new approach to promoting robust structures for strategic foresight techniques to become higher level competencies critical to organizations as a tool for attaining superior company performance. Prior research has been theoretical in nature, which this study complements through providing empirical findings.

The data collected validated both the strategic foresight and organization performance constructs through exploratory and confirmatory factor analysis techniques, and the research modelling showed good reliability of both constructs. The structural model developed to ascertain the impact of strategic foresight on organizational performance, showed a significant positive impact of strategic foresight on organizational performance. The model showed that the higher the level of strategic foresight, the higher will be the level of company performance. The study confirmed the hypotheses that there is a direct positive link between strategic foresight and company performance in textile firms in Pakistan, and that promotion of strategic foresight management practices will enhance company performance. More generally the study indicates clearly that an organization wishing to foster and sustain organizational performance needs to apply better means of strategic foresight, especially if the firm is operating in an uncertain and turbulent environment.

Strategic foresight has been argued to be a means by which corporations functionally benefit in competitive terms (Portaleoni et al., 2013). For profit making organizations, the single most important objective is arguably the

achievement of sustainable competitive advantage. Research has shown significant impact of the strategy making process in firms attaining superior performance (Aguilar, 1967; Anderson & Paine, 1975; Andrews, 1971; Bourgeois, 1980; Downey et al., 1975; Duncan, 1972; Hambrick, 1982; Uytterhoeven et al., 1977).

Producing strategic foresight is intended to allow firms to innovate and renew themselves, to understand and examine environmental disturbances and uncertainties, and prepare for future uncertainties (Ringland, 2010; René Rohrbeck et al., 2007; René Rohrbeck & Gemünden, 2008; Said & Hellara, 2013). Thus strategic foresight is intended to enhance a firm's value by increasing its capacity to perceive change and to interpret, understand and respond to it, by influencing other actors, and increasing capacity for organizational learning (René Rohrbeck & Gemünden, 2008; Said & Hellara, 2013).

It is argued that strategic foresight has a positive impact on the firm's performance as measured through different indicators namely profits, sales volume, market share, tax return on assets and sales, and overall performance. Strategic foresight allows a firm to successfully navigate complex, uncertain and volatile environments, allowing a firm to enhance their capability and thus their competitive advantage (Amniattalab & Ansari, 2016). Strategic foresight increases company performance by assisting in making scientifically grounded investment decisions by helping in identification of priority sectors of the firm. It also allows for establishing and maintaining relationships with relevant external actors and better positioning within the domestic and international market for its customers (Vishnevskiy et al., 2015). Thus, strategic foresight enhances increased performance through not only facilitating the identification of alternative visions of the future, but also through fostering the process of 'planned learning' about

the future, by enabling the organization to be ready to adapt to changing situations as they develop (Vecchiato, 2012; Vishnevskiy et al., 2015).

Strategic foresight can retain company performance in a turbulent environment by ensuring unity of the firm's organisational system, preventing problems arising out of a fast-moving firm, with its quick growth, to adversely affect its performance (Costanzo, 2004). Successful implementation of strategic foresight processes can provide a firm increased perception, increased ability to interpret change, and an increased ability to respond to change and greater capacity for organizational learning and influencing others leading to better performance (René Rohrbeck & Schwarz, 2013). Strategic foresight can also improve company performance by assisting in the assessment of a new business field, by providing insights on drivers, barriers, showstoppers, and provide recommendations on how to enter a new market (Heger & Rohrbeck, 2012). The results revealed that Management Techniques have a significant impact on company performance. The extant literature showed that management techniques can contribute positively to firm performance (Mengel, Cowan-Sahadath, and Follert, 2009; Kerzner, 2015; Richards, Yeoh, Chong and Popovic, 2019), however, negligence can cause negative results as well (Aaltonen, 2011; Chang, Chih, Chew and Pisarski, 2013; Hietbrink, Hartmann and Dewulf, 2012).

Kerzner (2015) stated that the use of the best management tools and techniques leads to added business value, greater benefit realization, and better benefit management activities. Similarly, Richards, Yeoh, Chong and Popovic (2019) stated that business intelligence (BI) and business analytics (BA) are management techniques which contribute to corporate management practices in order to enhance firm performance. On the other hand, there might be several

reasons for inefficient and ineffective application of management techniques into the business environment. One of reason for an insignificant effect of management technique-2 might be x the ignorance or poor stakeholder management (Hietbrink, Hartmann and Dewulf, 2012). Various studies indicate that issues within the stakeholder environment are mainly related to influential attributes and behaviours of stakeholders and their understanding and management (Beringer, Jonas and Kock, 2013; Fageha and Aibinu, 2013), which require exhaustive analysis, broader knowledge, and inclusive management methodology, techniques and tools in order to effectively be assessed, utilized and managed to ensure project well-being and success.

8.2 Effect of Management Practices on company performance

A further aim of the study was to assess the impact of different management practices on firm performance in the textile industry of Pakistan. The study contributes to the management literature by providing additional insight into how different management practices lead to improved organizational performance. More particularly, the role of 16 management practices in improving organizational performance were studied. Although most of the practices were found to have no significant relationship with organizational performance, a total of two practices had a significant positive impact (managing talent and process problem documentation), while three practices were found to have a negative impact on performance (retaining talent, company performance review and company performance dialogue). Removing poor performers was significant at $p < .10$.

Lack of significant findings of a positive relationship between several management practices and firm performance could be attributed to the fact that management practices are contingent on the business situation. Khanna (2015) noted that results from developed countries such as the US automatically applied to the rest of the world is not acceptable. He further noted that academics interested in management principles should be more cautious in generalizing the finding from one setting to another. Additionally, the assumption that the forms of reasoning from a developed context would result in the same conclusions in different contextual settings is logically and empirically suspect. The rise of emerging markets like Pakistan poses interesting challenges and opportunities to researchers—to identify which insights about management transfer – and to use the new research environments to identify some fundamental issues more clearly (Khanna, 2014). The findings are parallel to the study of Bloom et al (2016), who also found that adoption of management practices in Pakistan is far lower in comparison to other countries such as the US. They noted that an average firm in Pakistan adopts 44% of overall management practices and found that dispersion of management scores is also higher in Pakistan. Firms that are worse managed and have lower productivity seem to exit the market more slowly in emerging economies (Bloom, et al., 2016). However, Wadaman, Sully de Luque and Wang (2012), criticized Bloom’s work on management practices and noted that cross-cultural issues may also come into play in any interpretation of the work of Bloom et al. (2016). Indeed, cross-cultural differences across societies might influence perceptions of, and expectations for, management practices.

Firms in developing countries may not adopt performance measurement because wages are so low that measuring workers’ output is unnecessary (Bloom

et al., 2011). This could also be attributed to the notion that families exercise significant control over operations in the firms with management control revolving in the family, hence poor management practices were more prevalent (Bloom & Van Reenen, 2007).

However, the study found managing talent to be an effective tool in fostering organizational performance. This management practice is extremely compelling because it helps effectively plan and organize the employees. With such enormous responsibility on their shoulders, the subordinates would usually do their utmost to ensure the objectives are achieved and not to disappoint the boss. Hence, management wins their hearts and minds besides their loyalty (Ng, 2011).

The study found a significant impact of problem process documentation on performance. The results are parallel to the findings of Bloom and Van Reenen's (2007) study where they also found significant impact of problem process documentation. In their study Cox, Higgins and Speckesser (2011) also found that practices with beneficial links to improved productivity over the past years are training and team work, which can be a significant tool for managing talent. This could be attributed to the fact that an increased focus on processes may help in continuous improvements that leads to improved performance through identification of errors and anomalies. Reporting allows an organization to set sensible objectives and measure and monitor their degree of compliance. Such reporting will help to measure the extent to which customer requirements have been met and assist the stakeholders of a company with an on-going dialogue about the setting of company priorities and the allocation of resources (Malmadana Kapuge & Smith, 2007). The study found a significant negative impact of company performance review on performance. This is contrary to the

findings of Bloom and Van Reenen (2007) who found that company performance review has a positive impact on the performance of the organization. A continuous review of performance may offer a chance to reflect on the company practices and make amends as required. The study found a significant negative impact of company performance dialogue on performance. Contrary to prior research where dialogue has been found to significantly help in improving clarity of work practices and aid in improving the working of business units since it may help in timely monitoring of the events (Bloom & Van Reenen, 2007). This is also contrary to the study of Cox, Higgins and Speckesser (2011) who found that one of the practices with beneficial links to improved productivity over the past years is social dialogue practices.

The study also assessed whether the impact of management practices on performance is different in firms having a family member as CEO in comparison to those that have a non-family member as CEO. The results show that with companies having a family member as CEO, there is a higher number of management practices significantly influencing the company performance. This is contrary to the findings of Bloom and Van Reenen (2007), who found that poor management practices are more prevalent when product market competition is weak and/or when family-owned firms pass management control down in the family. Although, it has been identified that family firms lack modern management practices, such as, professionalism and attracting and retaining qualified staff (Sirmon & Hitt, 2003). The findings of the present study are also contrary to the findings of Bloom, Sadun, & Van Reenen (2015) who found that private equity owned firms have significantly better management practices than family-run

businesses. The advantages of family firms relate to their long time horizons (Zellweger, 2007). Since founding families regard their firms as an asset to pass onto their descendants rather than wealth to consume during their lifetime, family firms emphasize firm survival and long-term value rather than short-term financial performance (Casson, 1999). This is contrary to the existing research that has focused upon management practices as a tool to improve organizational performance (Bloom, Sadun, & Van Reenen, 2015; Bloom and Van Reenen, 2007). Moreover, most family firms have enduring and substantive missions that flow from the values of the founder (Miller & Le Breton-Miller, 2005). To achieve their mission, family firms continuously accumulate capability or loyalty in a defined market, retain a cohesive community of employees to sharpen capabilities, and establish stable partnerships with suppliers, clients, and the community to enhance the robustness and longevity of the firm. Unique resources such as human capital, social capital, patient capital, and governance structure also lead to advantages for family firms (Sirmon & Hitt, 2003). Additionally, it could be postulated that family firms prefer to continue their businesses, maintain the family's control and improve the family's reputation.

The results revealed that constraints on management carry a significant impact on company performance. This finding also supports prior studies. For example, Lee (2010), suggested a new constraints management triangle for project managers which consists on (i) resource elements including people, system and tools, (ii) financial elements including revenue, expense, budget, allocation and (iii) stakeholder elements including sponsor, client, and customer. The integration of the management constraint triangle into routine project management practices

helps project managers successfully complete their projects (Lee, 2010). Similarly, Gibbons and Henderson (2013) argued that management practices are a key reason for persistent performance differences across firms.

The results showed that there is a significant and positive impact of Business Environment on General Strategy. This finding also supports prior studies. Pretorius and Maritz (2011, p. 30) emphasized the importance of business environment in such a way that “the more stable the environment the more strategy making will lean towards the deliberate approach. In fact, emergent strategy making develops in response to this environmental change. The environment referred to can include elements such as industry maturity, speed of change, stability of technology and information availability”. Moreover Prajogo (2016) assessed the role of business environment as a contingency factor by applying contingency theory of organizations as the theoretical lens (Donaldson, 2001) which suggests that firms' strategies or capabilities must be aligned with the characteristics of the environment in which it operates in order to deliver competitive advantage (Donaldson, 2001; Powell, 1992).

The study found a significant effect of Business Environment on Strategic Foresight. This finding also supports prior studies (Glaister et al. 2008; Parnell, Lester, Long and Koseoglu, 2012). For example, Parnell et al. (2012) stated that small and medium enterprise managers must interpret the external business environment before they can develop and select an appropriate strategy. The proactive initiatives of project managers could enable firms to achieve better competitive advantages. Similarly, Glaister et al. (2008) found a strong correlation between formal strategic planning levels in large organizations and firm

performance. They further argued that factors such as environmental turbulence, organizational structure, and firm size influenced firms' strategic foresight.

The results revealed that Government Actions do not significantly impact strategic foresight. There might be several reasons for the insignificant impact of government actions. For example, according to Korai et al. (2017) Pakistan has developed laws, established government agencies and accepted technical assistance from donors such as the World Bank in order to respond to environmental problems. Despite that, the response remains fragmented and environmental laws, regulations and other initiatives have not solved the problem (Korai, Mahar and Uqaili, 2017). Hence, government laws and regulations must remain consistent and effective in relation to business environment.

In addition, result showed that Investment Environment has an insignificant impact on strategic foresight. Business Environment has a significant impact on strategic foresight. Christmann (2000) indicates firms will be able to achieve greater environmental improvements because they can make more efficient use of their internal experience and obtain constant improvements in strategic foresight that enhance their organizational efficiency. Similarly, Judge and Elenkov (2005) find empirical support for the hypothesis according to which the level of integration of environmental issues into the process of strategic planning and the availability of resources correlate positively with one another.

The results showed that there is a significant and positive impact of constraints on management on strategic foresight. Csaszar and Laureiro-Martínez (2018) suggested that a firm can improve its foresight by employing managers whose mental representations are broad and accurate and by leveraging the ability of groups to make better strategic decisions. Similarly, to overcome constraints on

management corporate managers should plan for the future in order to be ahead of threats and be aware of opportunities for growth (Amniattalab and Ansari, 2016).

8.2.1 Limitations and Future Research Directions

There are certain limitations of the study that should be acknowledged. First the study was conducted using cross-sectional data. Future research using longitudinal data would be useful to further assess any changes in perception with time. The study was limited to one country which limits the generalizability of the results. The model may be tested in other countries in order to have more generalized results. The study only assesses the direct impact of different management practices on organizational performance. It has been seen that factors that impact organizational performance are rarely direct and there could be significant mediators that could help explain the mechanism of impact. Hence, it is recommended that future research should assess the role of different mediating variables, such as, employee attitudes and behaviours that could ultimately lead to improved organizational performance. Additionally, the study was limited to 250 textile firms operating in Pakistan. Furthermore, the study is only based on the textile sector, which has its own unique characteristics. Future studies may be conducted in other industrial sectors, which would again help make the findings more generalizable. The study seeks to ascertain the direct relationship between strategic foresight and organizational performance. Future studies may include other variables that could further explain the link between strategic foresight and organizational performance. Future studies may include

management practices, organizational culture, and organizational structure as mediating variables.

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APPENDIX-1

Part 1: Organisation Questions

What is your position in the company (Job title): _____

How many employees does your company employ?

<50	()	250-499	()	2000-4999	()
50-99	()	500-999	()	>5000	()
100-249	()	1000-1999	()		

How many people directly report to you?

How long has your company been in operation?

Less than 5 years () 5-10 years () 11-20 years () 21-40 years ()
More than 40 years ()

How many domestic competitors do you have? _____

How many international competitors do you have? _____

What percentage of sales revenue comes from international sales?

Which of the following best describes your company?

Dependent on one single product for at least 95% of total company sales ()
Dependent on one major area of related products which accounts for at least 70% of total company sales ()
Diversified into more than one major product area (no single business accounts for more than 70% of total company sales) ()

Who owns the firm (i.e., who is the largest shareholder)? (Please tick one box)

Founder and/or Family Members ()	Private individuals ()	Managers ()
Government ()	Private Equity or Venture Capital ()	Joint Venture ()
Multinational company ()	No large shareholder ()	Others (please specify) _____

If Founder or Family owns the firm: Is a family member the CEO? No () Yes ()

When CEO control was passed down through the family was it given to the eldest son? No () Yes ()

How many family members are working in management in the firm?

How many different customer organizations does your company supply?

Approximately, what percentage of your company's sales volume is taken by your single largest customer? _____%

How many different supplier organizations does your company regularly deal with? _____

How many competitors does your company regularly monitor? _____

How many sites (e.g., plants and branches, including your HQ) does your company have? _____

Part 2: Government and Environment

To what extent do you agree with the following statements?					
1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree					
Business Environment					
1	Over the last 5 years the business situation has worsened in Pakistan	1	2	3	4 5
2	The uncertain domestic political situation is hampering business growth	1	2	3	4 5
3	There is great potential for growth of the textile industry in Pakistan	1	2	3	4 5
4	Competition from abroad is destroying the domestic textile industry	1	2	3	4 5
5	GSP Plus status has helped textile exports	1	2	3	4 5
To what extent do you agree with the following statements regarding Government action?					
1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree					
Government Actions					
1	There should be greater tax assistance for firms in the textile manufacturing sector	1	2	3	4 5
2	There should be greater emphasis on maintaining law and order in the country	1	2	3	4 5
3	There should be greater investment in R&D	1	2	3	4 5
4	There should be greater investment in universities to support programs in textile manufacturing	1	2	3	4 5
5	There should be maintenance of cordial relationships with foreign countries	1	2	3	4 5
6	There should be greater protection from foreign competition	1	2	3	4 5
7	There should be efforts to get USA, European and Middle Eastern authorities to increase Pakistan's textile trade quota	1	2	3	4 5
Before making new investment in the business to what extent do you consider the following factors?					
1 = Never 2 = Rarely 3 = Sometimes 4 = Often 5 = Always					
Investment and Environment					
1	The outcome of local elections	1	2	3	4 5
2	The extent of political unrest	1	2	3	4 5
3	The threat of terrorist attacks	1	2	3	4 5
4	Heightened tensions between Pakistan and its neighbors	1	2	3	4 5
5	Fluctuations in the Karachi and Lahore Stock Exchanges	1	2	3	4 5
6	Planned government spending on infrastructure	1	2	3	4 5
7	The relative scarcity of energy supplies	1	2	3	4 5

Part 3: General Strategy

How frequently does your firm engage in the following?						
1 = Never 2 = Infrequently 3 = Occasionally/Sometimes 4 = Often 5 = Always						
1	Follow the news	1	2	3	4	5
2	Observe the textile business globally	1	2	3	4	5
3	Observe the textile business in neighbouring countries	1	2	3	4	5
4	Take into account the problems faced by the textile business in other countries	1	2	3	4	5
5	Take into account the problems faced by the textile business in Pakistan	1	2	3	4	5
6	Identify practices employed by foreign textile firms that are your competition	1	2	3	4	5
7	Undertake business planning for more than a period of 5 years	1	2	3	4	5
8	Identify the causes of growing uncertainty in the textile business in Pakistan	1	2	3	4	5
9	Forecast demand for the company's products	1	2	3	4	5
10	Forecast growth in competition	1	2	3	4	5
11	Devise early warning mechanisms to anticipate problems	1	2	3	4	5
12	Undertake forecasting of future problems	1	2	3	4	5
13	Arrange strategy sessions to identify how to overcome industry problems	1	2	3	4	5
14	Encourage employees to engage in forecasting sessions	1	2	3	4	5
15	Encourage employees to engage in strategic sessions	1	2	3	4	5
16	Encourage your managers to engage in forecasting sessions	1	2	3	4	5
17	Encourage your managers to engage in strategic session	1	2	3	4	5

To what extent are the following factors important in creating weakness in strategy implementation?						
1 = Not important at all 2 = Not important 3 = Neutral 4 = Somewhat important 5 = Very important						
Weakness in strategy implementation						
1	Lack of trained workforce	1	2	3	4	5
2	Lack of the latest manufacturing technologies	1	2	3	4	5
3	High taxation	1	2	3	4	5
4	High cost of overcoming poor infrastructure	1	2	3	4	5
5	High cost of overcoming scarcity of energy supplies	1	2	3	4	5
6	Lack of government support	1	2	3	4	5
7	Competition from domestic manufacturers	1	2	3	4	5

8	Competition from foreign manufacturers	1	2	3	4	5
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Part 4: Strategic Foresight

To what extent do you agree with the following statements?						
1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree						
1	Our company has a department which engages in strategic sessions	1	2	3	4	5
2	Our company has a department which engages in forecasting sessions	1	2	3	4	5
3	Our company has a department which engages in strategy sessions	1	2	3	4	5
4	Encouraging foresight would increase the competitiveness of our business	1	2	3	4	5
5	Strategic learning without foresight would be futile	1	2	3	4	5
6	Early warning mechanisms are essential for success	1	2	3	4	5
7	Foresight is an essential competency for a successful business	1	2	3	4	5
8	An early warning mechanism is an essential competency for successful business	1	2	3	4	5
9	Prediction is an essential competency for successful business	1	2	3	4	5
10	Planning is an essential competency for successful business	1	2	3	4	5

Part 5: Firm Performance

Over the last 5 years how satisfied are you with your company's performance in terms of the following criteria?						
1 = Not at all satisfied 2 = Slightly satisfied 3 = Moderately satisfied 4 = Very satisfied 5 = Extremely satisfied						
1	Growth of profits	1	2	3	4	5
2	Growth of sales volume	1	2	3	4	5
3	Growth of market share	1	2	3	4	5
4	After tax return on total assets	1	2	3	4	5
5	After tax return on total sales	1	2	3	4	5
6	Ratio of total sales to total assets	1	2	3	4	5
7	Overall performance/success	1	2	3	4	5
Over the last 5 years how has your company performed relative to its major competitors in terms of the following criteria?						
1 = Definitely worse 2 = Worse 3 = Same 4 = Better 5 = Definitely better						
1	Growth of profits	1	2	3	4	5
2	Growth of sales volume	1	2	3	4	5
3	Growth of market share	1	2	3	4	5
4	After tax return on total assets	1	2	3	4	5
5	After tax return on total sales	1	2	3	4	5
6	Ratio of total sales to total assets	1	2	3	4	5
7	Overall performance/success	1	2	3	4	5

Part 6: Management Techniques

Management Techniques

Please indicate how frequently your firm uses the following management practices.					
1 = Never 2 = Infrequently 3 = Occasionally/Sometimes 4 = Often 5 = Always					
1	Benchmarking	1	2	3	4 5
2	Total Quality Management	1	2	3	4 5
3	Strategic Management	1	2	3	4 5
4	Coaching	1	2	3	4 5
5	CRM (Customer Relations Management)	1	2	3	4 5
6	Balanced Scorecards	1	2	3	4 5
7	Statistical Decision Making Models	1	2	3	4 5
8	Business Process Re-engineering	1	2	3	4 5
9	6-Sigma	1	2	3	4 5
10	Outsourcing	1	2	3	4 5
11	Strategic Human Resources Management	1	2	3	4 5
12	SRM (Supplier Relationship Management)	1	2	3	4 5
13	Lean Manufacturing	1	2	3	4 5
14	Integrated Marketing Management	1	2	3	4 5
15	Activity Based Costing (ABC)	1	2	3	4 5
16	Strategic Brand Management	1	2	3	4 5
17	Marketing Research	1	2	3	4 5
18	Enterprise Resource Planning (ERP)	1	2	3	4 5
19	Customer Satisfaction Measurement	1	2	3	4 5
20	Supply Chain Management	1	2	3	4 5
21	Talent Management	1	2	3	4 5
Over the last 5 years, please indicate the effect of these above mentioned techniques on your firm's performance in terms of the following criteria.					
1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree					
1	Our market share has increased.	1	2	3	4 5
2	Our profitability has increased.	1	2	3	4 5
3	Our sales volume has increased.	1	2	3	4 5
4	Our process efficiency has improved.	1	2	3	4 5
5	Employee motivation has increased.	1	2	3	4 5
6	Overall firm performance has increased.	1	2	3	4 5
Please indicate to what extent you agree/disagree with the following statements.					
1 = Strongly disagree 2 = Disagree 3 = Neutral 4 = Agree 5 = Strongly agree					
Process problem documentation					
1	Process improvements are made only when problems arise.	1	2	3	4 5

2	Process improvements are actively sought out for continuous improvement.	1	2	3	4	5
3	Process improvements are a part of normal business processes.	1	2	3	4	5
Company performance tracking						
1	Key Performance Indicators (KPIs) are used for tracking company performance.	1	2	3	4	5
2	KPIs are measured frequently.	1	2	3	4	5
3	KPI data is shared widely.	1	2	3	4	5
4	KPI measures indicate directly if overall business objectives are being met.	1	2	3	4	5
5	The performance of certain processes is not tracked at all.	1	2	3	4	5
6	Most KPIs are tracked formally.	1	2	3	4	5
7	KPI tracking is overseen by senior management.	1	2	3	4	5
8	Company performance is continually tracked.	1	2	3	4	5
9	Company performance is communicated to all staff.	1	2	3	4	5
Company performance review						
1	Company performance is reviewed infrequently.	1	2	3	4	5
2	Company performance is reviewed only on a success/failure scale.	1	2	3	4	5
3	Company performance is reviewed continually with an expectation of continuous improvement.	1	2	3	4	5
4	Company performance is communicated to senior management.	1	2	3	4	5
5	If company performance is poor there is no clear follow up plan.	1	2	3	4	5
6	Company performance results are communicated to all staff.	1	2	3	4	5
Company performance dialogue						
1	In review/performance meetings the right data or information is often not present.	1	2	3	4	5
2	In review/performance meetings discussion overly focuses on data that is not meaningful.	1	2	3	4	5
3	In review/performance meetings there is often no clear agenda and the objectives of the meeting are not clear.	1	2	3	4	5
4	In review/performance meetings discussion drives to the root cause of problems.	1	2	3	4	5
5	Review/performance meetings are an opportunity for constructive feedback and coaching.	1	2	3	4	5
Consequence management						
1	Failure to achieve agreed objectives does not carry any consequences.	1	2	3	4	5
2	Failure to achieve agreed objectives is tolerated for a period before action is taken.	1	2	3	4	5
3	Failure to achieve agreed objectives leads to retraining in identified areas of weakness.	1	2	3	4	5
4	Failure to achieve agreed objectives leads to reassignment to other jobs where skills are more appropriate.	1	2	3	4	5
Company target balance						
1	The goals set are exclusively financial.	1	2	3	4	5
2	The goals include non-financial targets.	1	2	3	4	5
3	The goals are a balance of financial and non-financial targets.	1	2	3	4	5
4	Senior managers believe that non-financial targets are more inspiring	1	2	3	4	5

	and challenging than financial targets alone.					
5	Non-financial targets form part of the performance appraisal of top management only.	1	2	3	4	5
Company target interconnection						
1	Company goals are based on accounting figures, with no clear connection to shareholder value.	1	2	3	4	5
2	Company goals are based on shareholder value.	1	2	3	4	5
3	Company goals are clearly cascaded down to individuals.	1	2	3	4	5
4	Company goals become more specific as they cascade to business units.	1	2	3	4	5
5	Company goals ultimately define individual performance expectations.	1	2	3	4	5
Company target time horizon						
1	Top management's main focus is on short term targets.	1	2	3	4	5
2	There are both short term and long term goals for all levels of the organization.	1	2	3	4	5
3	Short term goals and long term goals are set independently and so are not necessarily linked to each other.	1	2	3	4	5
4	Long term goals are translated into specific short term targets.	1	2	3	4	5
5	Short term targets are a 'staircase' to reach long term goals.	1	2	3	4	5
Company target stretching						
1	Company goals are too easy to achieve.	1	2	3	4	5
2	Company goals are too difficult to achieve.	1	2	3	4	5
3	Company goals are genuinely demanding for all divisions.	1	2	3	4	5
4	Company goals are grounded in solid economic rationale.	1	2	3	4	5
5	All groups receive the same degree of difficulty in terms of targets.	1	2	3	4	5
6	My individual targets are tough to meet.	1	2	3	4	5
7	I usually meet my individual targets.	1	2	3	4	5
Individual performance clarity						
1	Individual performance measures are complex and not clearly understood.	1	2	3	4	5
2	Individual performance measures are well defined.	1	2	3	4	5
3	Individual performance measures are communicated well.	1	2	3	4	5
4	Individual performance is made public at all levels.	1	2	3	4	5
5	Comparisons of individual performance are not encouraged.	1	2	3	4	5
6	Individual performance is made public in order to encourage competition.	1	2	3	4	5
7	Individuals can compare their own performance with that of others.	1	2	3	4	5
Managing talent						
1	Senior managers show that attracting and developing talent is a top priority.	1	2	3	4	5
2	Senior managers communicate that having top talent throughout the organization is a key way to win.	1	2	3	4	5
3	Senior managers are evaluated on the strength of the talent pool they actively build.	1	2	3	4	5
4	Senior managers are rewarded for bringing in and keeping talented people in the company.	1	2	3	4	5
Rewarding high performance						

1	People in our firm are rewarded equally irrespective of individual performance level.	1	2	3	4	5
2	Our company has an evaluation system for the awarding of individual performance.	1	2	3	4	5
3	We strive to outperform our competitors by providing ambitious individual stretch targets.	1	2	3	4	5
4	Rewards are clearly related to individual performance targets.	1	2	3	4	5
5	There are non-financial rewards for top performers.	1	2	3	4	5
6	There is a systematic approach to identifying individual performance.	1	2	3	4	5
Removing poor performers						
1	Poor performers are rarely removed from their positions.	1	2	3	4	5
2	Poor performers stay in a position a few years before action is taken.	1	2	3	4	5
3	Poor performers are moved to a new role as soon as a weakness is identified.	1	2	3	4	5
4	Poor performers are moved out of the company as soon as a weakness is identified.	1	2	3	4	5
5	Some workers always just manage to avoid being moved or fired.	1	2	3	4	5
6	Underperformance is not tolerated.	1	2	3	4	5
Promoting high performers						
1	People are promoted primarily on the basis of length of service.	1	2	3	4	5
2	People are promoted primarily on the basis of performance.	1	2	3	4	5
3	Our company actively identifies, develops and promotes top performers.	1	2	3	4	5
4	If two people both joined the company 5 years ago and one was much better than the other, that person would have been promoted ahead of the other.	1	2	3	4	5
Attracting human capital						
1	Our competitors offer stronger reasons for talented people to join their companies.	1	2	3	4	5
2	Rewards and benefits provided by our company are comparable to that offered by others in the sector.	1	2	3	4	5
3	We provide rewards and benefits better than our competitors to encourage talented people to join our company.	1	2	3	4	5
Retaining talent						
1	My company does little to try and keep top talent.	1	2	3	4	5
2	My company usually works hard to keep top talent.	1	2	3	4	5
3	My company will do whatever it takes to retain top talent.	1	2	3	4	5
4	No star performer has ever left the company without someone trying to keep them.	1	2	3	4	5
5	Some star performers have been persuaded to stay after wanting to leave.	1	2	3	4	5

Part 7: Constraints on Management

To what extent do you think the following are obstacles to improving any of your management practices?

1 = Not an obstacle 2 = Somewhat obstacle 3 = Minor obstacle 4 = Obstacle 5 = Major

obstacle						
1	Hiring managers with the right skills.	1	2	3	4	5
2	Hiring non-managers with the right skills.	1	2	3	4	5
3	Training and development of existing employees.	1	2	3	4	5
4	Employment laws and regulations.	1	2	3	4	5
5	Trade unions.	1	2	3	4	5
6	Knowing what new management practices to introduce.	1	2	3	4	5
7	Bureaucracy within the organization.	1	2	3	4	5
8	Obtaining cost-effective management consultancy.	1	2	3	4	5
9	Any other (please state)?	1	2	3	4	5

THANK YOU FOR YOUR HELP WITH THIS STUDY.

Would you like to receive a copy of the results of this study?

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APPENDIX-2

MANAGEMENT PRACTICES

Bloom & Van Reenen (2007)

S/No	Practices
1.	Introduction of modern manufacturing techniques: the issue is whether new manufacturing techniques being identified in research and being used by market leaders have been formally introduced.
2.	Rationale for introduction of modern manufacturing techniques: this concerns why modern manufacturing techniques have been introduced - to meet business objectives or just because others were using them.
3.	Process problem documentation: the issue is whether improvements are only made when problems arise or there is quest for continuous improvement as part of the business process.
4.	Performance tracking: what forms does tracking take - is it ad hoc or continuous track of performance across the different sectors of the firm.
5.	Performance review: is the performance reviewed continually or only infrequently?
6.	Performance dialogue: does the review process take the form of a dialogue/conversation and how clear are the follow up steps, data, purpose and agenda in such reviews?
7.	Consequence management: what are the consequences of failure and success?
8.	Target balance: do the goals represent a balance between financial goals and

	non-financial goals?
9.	Target interconnection: are the goals only based on accounting value or are they set in a way that connects different aspects of the firms and individual performance with the goals of the firm?
10.	Target time horizon: is the focus of management only on short term goals or are long term goals also important? Are short term goals considered as a 'staircase' towards attainment of long-term goals?
11.	Target stretching: do goals only target easy areas of reform within the firm or do they target every part of the firm, even those areas that are considered hard to reform?
12.	Performance clarity: are performance measures well-defined, clearly communicated, and made public?
13.	Managing human capital: is everyone held accountable from the top to the bottom? Are human resource practices used to train and manage human capital?
14.	Rewarding high performance: is reward linked to performance?
15.	Removing poor performers: is poor performance grounds for letting go of employees or are there other methods, such as training and/or moving poor performers to other areas of the firms, used?
16.	Promoting high performers: is promotion based only on tenure or does performance also play a role in promotion?
17.	Attracting human capital: does the firm provide a range of reasons to encourage talented people to join it and how does its reasons compare to the attractions offered by competitors?

18.	Retaining human capital: is an effort made to attract top talent and to retain it?
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APPENDIX-3

FORESIGHT FRAMEWORK

Voros (2003)

Phases	Description
Inputs	<p>During this phase the emphasis is on gathering intelligence and scanning for strategic intelligence. A number of methods or techniques can be used during this phase, for example the “Delphi” method and the “environmental scanning” or “intelligence scanning” or “strategic scanning” methods to gather information and think about future possibilities (Choo, 2002). In this regard brainstorming during workshops and the technique of “constructing the near-future context” - asking a set of key questions designed to open out the thinking about the near future can be used to further improve thinking about the future.</p>
Foresight Work	<p>This phase involves three broad steps following a logical sequence; a failure to engage in one step can adversely affect the foresight exercise the organisation is engaged in.</p> <p>Analysis:</p> <p>This is the preliminary phase preceding more in-depth work and involves asking questions like “what seems to be happening?”. The</p>

objective being to create some order out of the data collected during the first phase. Tools that can be used during this phase include analysis, cross-impact matrices and other such analytical techniques.

The results of this step are fed into the second step.

Interpretation:

The purpose here to answer questions like “what’s really happening?” It is intended to interpret the findings of the first phase and step, to probe beneath the surface and to look for deeper structures, insights and patterns. This step is part of the critical futures studies as explained by Inayatullah (1998), Miller (2017) and Slaughter (1989, 2000).

Prospection:

Voros (2003) invents the word “prospection” to denote “the activity of purposefully looking forward to create forward views”. It is during this step that a conscientious effort is made to explicitly think and examine and/or create alternative futures. Scenarios, ‘visioning’ and ‘normative’ methods are used to discover future possibilities. The exact questions to be used during this step will depend upon the type of potential futures under consideration – possible, plausible, probable or preferable. For Voros (2003) ‘possible futures’ is the class that includes all those futures which we can possibly imagine, not matter how unlikely or far-fetched

(science fiction will be part of this class, even that which is not consistent with the currently known laws of physics). ‘Plausible futures’ is the class that includes all those events that could happen according to our current knowledge as opposed to future knowledge, and only includes those futures which are considered reasonable by our current understanding of how the world works in reality. ‘Probable futures’ is the class that includes those futures that are considered “likely to happen” and some of them may be considered more likely to happen than others and are a continuation of current trends. While ‘preferable futures’ can be contrasted with those mentioned above; being concerned with what we “want to” happen, being more emotional than cognitive, unlike others classes which are largely concerned with informational or cognitive knowledge (Voros, 2003).

Voros (2003) provides an interesting tool for the foresight process to be used in scenario building that can be quite helpful - wildcards. They can be defined as low probability even or mini-scenarios which if they occurred would have a very high impact. One example would be “long-term global communication disruption” and the effect such a scenario could have on the organisation. The wildcards can be useful to push thinking into new areas of imagination, pushing the boundary of the possible. They can help in considering factors, options and things that might not

	normally be considered even with all the tools used during the foresight phase (Voros, 2003).
Outputs	<p>The foresight phase will yield two outputs - tangible and intangible. The intangible outputs can be argued to be more important even if “difficult for some hard-headed, “objective” people to appreciate, or even to recognise”. They include the change in thinking processes and insights and forward-looking view engendered as a result of the foresight activity. The importance of intangible outcomes lies in the potential it has to change strategy development mechanisms. Tangible outcomes on the other hand include the more concrete results - “the actual range of options generated by the foresight exercises”. The objective at this stage is to use various methodologies including, but not limited to, workshops, reports, role-play, film, multimedia and full-immersion experiential events to get across the insights and options generated during the previous phases into inputs for more formalized strategy work. The focus is on the question “what might we need to do?”</p> <p>This marks the end of real job for foresight for by this time it has generated “an expanded perception of strategic options available. This output now feeds into strategy” (Voros, 2003).</p>
Strategy	Once foresight has done its job in providing outputs, it is at this stage that decision makers need to make decisions and devise strategy for implementation based on the knowledge and options

	<p>garnered from pervious phases. This will also mean that there would need to be a loop - results of the strategy process need to be constantly fed back into inputs of the overall foresight framework for continuous re-assessment and course correction (Voros, 2003).</p>
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APPENDIX-4

SUMMARY AND CONCLUSION - HYPOTHESES SUPPORTING LITERATURE

Hypotheses	STATEMENT	RESULTS	Supporting Literature Ref
H1	There is a significant impact of government and environment on firm performance	Supported	(Prajogo, 2016; Hafeez, 2013; Korai, Mahar and Uqaili; 2017; Post and Altman, 1992; Billing and Scott, 1995; Ejdys, 2013)
H1a	There is a significant impact of government actions on firm performance	Not Supported	
H1b	There is a significant impact of investment environment on firm performance	Supported	
H1c	There is a significant impact of business environment on firm performance	Supported	
H2	There is a significant positive impact of general strategy on firm performance		
H2a	There is a significant positive impact of forecasting on firm performance		
H2b	There is a significant positive impact of participation on firm performance		
H2c	There is a significant positive impact of observation on firm performance		
H3	There is a significant positive impact of general strategy on financial performance	Partially Supported	(Saeidi et al., 2015; Kotha, Rindova, and Rothaermel, 2001; Roberts and Dowling, 2002)
H4	There is a significant positive impact of strategic foresight on firm performance	Supported	(Dvir et al., 1993; Veliyath & Shortell, 1993; Anderson & Reeb, 2003; Villalonga &

H4a	The number of international competitors positively moderates the relationship between strategic foresight and organizational performance, i.e. the greater the number of international competitors the stronger will be the relationship between strategic foresight and organizational performance.	Supported	Amit, 2006; Schoemaker, 2012; Chakrabarty & Wang, 2013)
H4b	The level of international sales positively moderates the relationship between strategic foresight and organizational performance, i.e. the greater the level of international sales the stronger will be the relationship between strategic foresight and organizational performance.	Not Supported	
H5	There is a significant positive impact of strategic foresight on financial performance	Supported	
H6	There is a significant positive impact of management techniques on firm performance	Supported	
H6a	There is a significant positive impact of Management Techniques 1 on Firm Performance	Supported	
H6b	There is a significant positive impact of Management Techniques 2 on Firm Performance	Not Supported	
H7	There is a significant positive impact of management practices on firm performance	Partially Supported	(Contrary to Bloom, Sadun, & Van Reenen, 2015; Bloom and Van Reenen, 2007)
H8	There is a significant impact of constraints on management on firm performance	Supported	(Lee, 2010; Gibbons and Henderson, 2013)
H9	There is a significant impact of government and environment on general strategy	Supported	(Pretorius and Maritz, 2011; Prajogo, 2016)
H10	There is a significant impact of government and environment on strategic foresight	Supported	(Glaister et al. 2008; Parnell, Lester, Long and Koseoglu, 2012; Korai et al., 2017;

H10a	There is a significant impact of government actions on strategic foresight	Supported	Christmann, 2000; Judge and Elenkov, 2005)
H10b	There is a significant impact of investment environment on strategic foresight	Not Supported	
H10c	There is a significant impact of business environment on strategic foresight	Supported	
H11	There is a significant impact of constraints on management on strategic foresight	Supported	(Csaszar and Laureiro-Martínez , 2018; Amniattalab and Ansari, 2016)

APPENDIX-5

5. 1: Number of Employees by Categories

	Frequency	Percent	Valid Percent	Cumulative Percent
500-599	38	15.2	15.2	15.2
600-699	109	43.6	43.6	58.8
700-799	83	33.2	33.2	92.0
800-899	11	4.4	4.4	96.4
900-999	9	3.6	3.6	100.0
Total	250	100.0	100.0	

5. 2 Number of People Reporting

	Frequency	Percent	Valid Percent	Cumulative Percent
11-20	61	24.4	24.4	24.4
21-30	73	29.2	29.2	53.6
31-40	51	20.4	20.4	74.0
41-50	31	12.4	12.4	86.4
51-60	8	3.2	3.2	89.6
61-70	12	4.8	4.8	94.4
71-80	10	4.0	4.0	98.4
91-100	4	1.6	1.6	100.0
Total	250	100.0	100.0	

5. 3: Length of Company Operations

	Frequency	Percent	Valid Percent	Cumulative Percent
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21-25	48	19.2	19.2	19.2
26-30	71	28.4	28.4	47.6
31-35	82	32.8	32.8	80.4
36-40	49	19.6	19.6	100.0
Total	250	100.0	100.0	

5. 4: Number of Domestic Competitors

	Frequency	Percent	Valid Percent	Cumulative Percent
100-149	91	36.4	36.4	36.4
150-199	149	59.6	59.6	96.0
200-249	10	4.0	4.0	100.0
Total	250	100.0	100.0	

5. 5: Number of International Competitors

	Frequency	Percent	Valid Percent	Cumulative Percent
150-249	39	15.6	15.6	15.6
250-349	141	56.4	56.4	72.0
350-449	70	28.0	28.0	100.0
Total	250	100.0	100.0	

5. 6: Sales revenue from international sales

	Frequency	Percent	Valid Percent	Cumulative Percent
.07%	2	.8	.8	.8
.10%	16	6.4	6.4	7.2
.11%	2	.8	.8	8.0

.12%	2	.8	.8	8.8
.13%	2	.8	.8	9.6
.15%	85	34.0	34.0	43.6
.17%	3	1.2	1.2	44.8
.18%	2	.8	.8	45.6
.20%	56	22.4	22.4	68.0
.25%	42	16.8	16.8	84.8
.30%	20	8.0	8.0	92.8
.35%	11	4.4	4.4	97.2
.40%	3	1.2	1.2	98.4
.45%	4	1.6	1.6	100.0
Total	250	100.0	100.0	

5.7: Company Description

	Frequency	Percent	Valid Percent	Cumulative Percent
Dependent on one single product for at least 95% of total company sales	10	4.0	4.0	4.0
Dependent on one major area of related products which accounts for at least 70% of total company sales	19	7.6	7.6	11.6
Diversified into more than one major product area (no single business accounts for more than 70% of total company sales)	221	88.4	88.4	100.0
Total	250	100.0	100.0	

5. 8: Descriptive Statistics for Customer Organizations Served

	Frequency	Percent	Valid Percent	Cumulative Percent
100-150	118	47.2	47.2	47.2
151-200	132	52.8	52.8	100.0
Total	250	100.0	100.0	

5. 9: Number of Family Members in Management

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	96	38.4	38.4	38.4
	1	20	8.0	8.0	46.4
	2	70	28.0	28.0	74.4
	3	32	12.8	12.8	87.2
	4	27	10.8	10.8	98.0
	5	5	2.0	2.0	100.0
	Total	250	100.0	100.0	

5. 10: Descriptive Statistics for Supplier Organizations

	Frequency	Percent	Valid Percent	Cumulative Percent
1-20	3	1.2	1.2	1.2
21-40	2	.8	.8	2.0
41-60	98	39.2	39.2	41.2
61-80	147	58.8	58.8	100.0
Total	250	100.0	100.0	

5. 11: Percentage Company's Sales taken by single largest customer

	Frequency	Percent	Valid Percent	Cumulative Percent
05%	7	2.8	2.8	2.8
10%	69	27.6	27.6	30.4
11%	2	.8	.8	31.2
12%	6	2.4	2.4	33.6
15%	41	16.4	16.4	50.0
18%	2	.8	.8	50.8
20%	70	28.0	28.0	78.8
23%	2	.8	.8	79.6
25%	18	7.2	7.2	86.8
30%	19	7.6	7.6	94.4
35%	2	.8	.8	95.2
36%	2	.8	.8	96.0
40%	10	4.0	4.0	100.0
Total	250	100.0	100.0	

5. 12: Number of Competitors Monitored

	Frequency	Percent	Valid Percent	Cumulative Percent
10.00	4	1.6	1.6	1.6
11.00	4	1.6	1.6	3.2
12.00	6	2.4	2.4	5.6
13.00	30	12.0	12.0	17.6
14.00	30	12.0	12.0	29.6

15.00	35	14.0	14.0	43.6
16.00	58	23.2	23.2	66.8
17.00	35	14.0	14.0	80.8
18.00	26	10.4	10.4	91.2
19.00	12	4.8	4.8	96.0
20.00	10	4.0	4.0	100.0
Total	250	100.0	100.0	

5. 13: Sites under Company

	Frequency	Percent	Valid Percent	Cumulative Percent
1	41	16.4	16.4	16.4
2	47	18.8	18.8	35.2
3	53	21.2	21.2	56.4
4	69	27.6	27.6	84.0
5	9	3.6	3.6	87.6
6	14	5.6	5.6	93.2
7	5	2.0	2.0	95.2
8	12	4.8	4.8	100.0
Total	250	100.0	100.0	

5. 14: Family Member as CEO

	Frequency	Percent	Valid Percent	Cumulative Percent
No	109	43.6	43.6	43.6
Yes	141	56.4	56.4	100.0
Total	250	100.0		

5. 15: Transfer of Control

	Frequency	Per cent	Valid Per cent	Cumulative Per cent
No	109	43.6	43.6	43.6
Yes	141	56.4	56.6	100.0
Total	250	100.0	100.0	

5. 16: Descriptive Statistics for Business Environment

Business Environment	Mean	SD	Rank
There is great potential for growth of the textile industry in Pakistan	4.24	1.15	1
Competition from abroad is destroying the domestic textile industry (R)	4.24	1.13	2
GSP Plus status has helped textile exports	4.12	1.24	3
Over the last 5 years the business situation has worsened in Pakistan (R)	4.06	1.22	4
The uncertain domestic political situation is hampering business growth (R)	3.95	1.27	5

5. 17: Descriptive Statistics for Government Actions

Government Actions	Mean	SD	Rank
There should be greater investment in R&D	3.91	1.26	1
There should be greater protection from foreign competition	3.88	1.31	2
There should be greater investment in universities to support programs in textile manufacturing	3.74	1.28	3
There should be maintenance of cordial relationships with foreign countries	3.65	1.32	4

There should be greater tax assistance for firms in the textile manufacturing sector	3.61	1.37	5
There should be greater emphasis on maintaining law and order in the country	3.55	1.39	6
There should be efforts to get USA, European and Middle Eastern authorities to increase Pakistan's textile trade quota	3.54	1.07	7

5. 18: Descriptive Statistics for Investment and Environment

Investment and Environment	Mean	SD	Rank
The threat of terrorist attacks	3.69	1.05	1
Heightened tensions between Pakistan and its neighbours	3.69	1.03	2
Planned government spending on infrastructure	3.67	1.01	3
The relative scarcity of energy supplies	3.66	1.11	4
The outcome of local elections	3.61	1.09	5
Fluctuations in the Karachi and Lahore Stock Exchanges	3.53	1.04	6
The extent of political unrest	3.44	1.10	7

5. 19: Descriptive statistics for general strategy

Observation	Mean	SD	Rank
Identify practices employed by foreign textile firms that are your competition	4.66	.826	1
Observe the textile business in neighboring countries	4.62	.959	2
Take into account the problems faced by the textile business in other countries	4.62	.938	3
Take into account the problems faced by the textile business in Pakistan	4.56	.931	4

Follow the news	4.50	1.031	5
Observe the textile business globally	3.97	1.450	6
<i>Forecasting</i>			
Undertake forecasting of future problems	4.12	1.186	7
Identify the causes of growing uncertainty in the textile business in Pakistan	4.08	1.162	8
Undertake business planning for more than a period of 5 years	4.05	1.159	9
Forecast growth in competition	4.05	1.181	10
Forecast demand for the company's products	4.02	1.168	11
Devise early warning mechanisms to anticipate problems	3.97	1.180	12
<i>Participation</i>			
Arrange strategy sessions to identify how to overcome industry problems	4.32	.999	13
Encourage your managers to engage in strategic session	4.31	1.075	14
Encourage employees to engage in forecasting sessions	4.27	1.056	15
Encourage your managers to engage in forecasting sessions	4.26	1.115	16
Encourage employees to engage in strategic sessions	4.21	1.056	17

5. 20: Descriptive statistics for Strategic Foresight

	Mean	SD	Rank
Planning is an essential competency for successful business	4.68	.684	1
Encouraging foresight would increase the competitiveness of our business	4.67	.748	2
An early warning mechanisms is an essential competency	4.63	.792	3

for successful business			
Our company has a department which engages in forecasting sessions	4.60	.878	4
Our company has a department which engages in strategy sessions	4.57	.908	5
Prediction is an essential competency for successful business	4.55	.831	6
Strategic learning without foresight would be futile	4.54	.892	7
Foresight is an essential competency for a successful business	4.54	.888	8

5. 21: Descriptive statistics for company performance

	Mean	SD	Rank
Growth of profits	4.15	1.17	1
Overall performance/success	4.15	1.10	2
Growth of sales volume	4.12	1.16	3
Ratio of total sales to total assets	4.10	1.13	4
Growth of market share	4.00	1.22	5
After tax return on total sales	4.00	1.25	6
After tax return on total assets	3.98	1.28	7

5. 22: Descriptive statistics for Management Techniques.

	Mean	SD	Rank
SRM (Supplier Relationship Management)	4.08	1.032	1
Marketing Research	4.06	1.039	2

Enterprise Resource Planning (ERP)	4.11	1.049	3
Customer Satisfaction Measurement	4.00	1.160	4
Supply Chain Management	4.06	1.107	5
Strategic Brand Management	3.99	1.209	6
Strategic Human Resources Management	3.98	1.182	7
Talent Management	3.78	.877	8
Integrated Marketing Management	3.77	.931	9
Activity Based Costing (ABC)	3.77	.884	10
Lean Manufacturing	3.76	.853	11
Statistical Decision Making Models	3.64	.960	12
Total Quality Management	3.61	1.037	13
Balanced Scorecards	3.60	.966	14
Strategic Management	3.56	1.009	15
CRM (Customer Relations Management)	3.56	.968	16
Benchmarking	3.55	.927	17
Outsourcing	3.26	1.123	18
6-Sigma	3.19	.874	19
Business Process Re-engineering	3.03	.838	20

5. 23: Descriptive Statistics for Problem Process Documentation

	Mean	SD	Rank
Process improvements are made only when problems arise (R)	3.81	1.05	1
Process improvements are actively sought out for	3.81	1.02	1

continuous improvement.			
Process improvements are a part of normal business processes.	3.64	1.06	3

5. 24: Descriptive Statistics for Company Performance Tracking

	Mean	SD	Rank
Company performance is continually tracked.	3.79	1.21	1
Company performance is communicated to all staff.	3.66	1.02	2
KPIs are measured frequently.	3.56	1.15	3
KPI tracking is overseen by senior management.	3.56	1.31	4
Key Performance Indicators (KPIs) are used for tracking company performance.	3.52	1.16	5
KPI measures indicate directly if overall business objectives are being met.	3.5	1.12	6
KPI data is shared widely.	3.48	1.19	7
Most KPIs are tracked formally.	3.4	1.18	8
The performance of certain processes is not tracked at all.	3.35	1.17	9

5. 25: Descriptive Statistics for Company Performance Review

	Mean	SD	Rank
Company performance is reviewed continually with an expectation of continuous improvement.	3.6	1.23	1

Company performance is communicated to senior management.	3.39	1.24	2
Company performance results are communicated to all staff.	3.3	1.23	3
If company performance is poor there is no clear follow up plan (R)	3.26	1.27	4
Company performance is reviewed infrequently (R)	3.24	1.37	5
Company performance is reviewed only on a success/failure scale (R)	3.16	1.42	6

5. 26: Descriptive Statistics for Company Performance Dialogue

	Mean	SD	Rank
In review/performance meetings the right data or information is often not present (R)	3.84	1.02	1
In review/performance meetings discussion overly focuses on data that is not meaningful (R)	3.84	0.99	2
Review/performance meetings are an opportunity for constructive feedback and coaching.	3.67	1.1	3
In review/performance meetings there is often no clear agenda and the objectives of the meeting are not clear (R)	3.66	1.05	4
In review/performance meetings discussion drives to the root cause of problems.	3.62	1.1	5

5. 27: Descriptive Statistics for Consequence Management

	Mean	SD	Rank
Failure to achieve agreed objectives does not carry any consequences (R).	3.36	1.28	1
Failure to achieve agreed objectives leads to retraining in identified areas of weakness.	3.36	1.29	2
Failure to achieve agreed objectives is tolerated for a period before action is taken.	3.26	1.24	3
Failure to achieve agreed objectives leads to reassignment to other jobs where skills are more appropriate.	3.24	1.26	4

5. 28: Descriptive Statistics for Company Target Balance

	Mean	SD	Rank
The goals set are exclusively financial (R)	3.42	1.22	1
The goals are a balance of financial and non-financial targets.	3.38	1.25	2
Senior managers believe that non-financial targets are more inspiring and challenging than financial targets alone.	3.28	1.24	3
Non-financial targets form part of the performance appraisal of top management only.	3.28	1.27	4
The goals include non-financial targets.	3.12	1.24	5

5. 29: Descriptive Statistics for Company Target Interconnection

	Mean	SD	Rank
Company goals are based on accounting figures, with no clear connection to shareholder value (R).	3.49	1.11	1
Company goals are based on shareholder value.	3.32	1.24	2
Company goals become more specific as they cascade to business units.	3.28	1.28	3
Company goals are clearly cascaded down to individuals.	3.23	1.27	4
Company goals ultimately define individual performance expectations.	3.19	1.29	5

5. 30: Descriptive Statistics for Company Target Time Horizon

	Mean	SD	Rank
Short term targets are a 'staircase' to reach long term goals.	3.69	1.05	1
There are both short term and long-term goals for all levels of the organizations.	3.68	1.02	2
Short term goals and long-term goals are set independently and so are not necessarily linked to each other (R)	3.64	1.09	3
Long term goals are translated into specific short-term targets.	3.6	1.13	4
Top management's main focus is on short term targets (R)	3.42	1.14	5

5. 31: Descriptive Statistics for Company Target Stretching

	Mean	SD	Rank
Company goals are grounded in solid economic rationale.	3.75	0.99	1
My individual targets are tough to meet.	3.67	1.01	2
All groups receive the same degree of difficulty in terms of targets.	3.58	1.08	3
Company goals are genuinely demanding for all divisions.	3.53	1.04	4
Company goals are too difficult to achieve.	3.52	1.04	5
I usually meet my individual targets.	3.5	1.09	6
Company goals are too easy to achieve.	3.41	1.18	7

5. 32: Descriptive Statistics for Individual Performance Clarity

	Mean	SD	Rank
Individuals can compare their own performance with that of others.	3.7	0.99	1
Individual performance is made public in order to encourage competition.	3.69	0.98	2
Comparisons of individual performance are not encouraged (R).	3.6	1.05	3
Individual performance measures are complex and not clearly understood (R)	3.58	1.07	4
Individual performance measures are communicated well.	3.55	1.02	5
Individual performance is made public at all levels	3.55	1.02	6

Individual performance measures are well defined.	3.44	1.15	7
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5. 33: Descriptive Statistics for Management Talent

	Mean	SD	Rank
Senior managers show that attracting and developing talent is a top priority.	3.66	1.13	1
Senior managers communicate that having top talent throughout the organizations is a key way to win.	3.64	1.05	2
Senior managers are evaluated on the strength of the talent pool they actively build.	3.61	1.04	3
Senior managers are rewarded for bringing in and keeping talented people in the company.	3.58	1.01	4

5. 34: Descriptive Statistics for Rewarding High Performance

	Mean	SD	Rank
Our company has an evaluation system for the awarding of individual performance.	3.96	1.03	1
Rewards are clearly related to individual performance targets.	3.93	0.98	2
There is a systematic approach to identifying individual performance.	3.93	1.06	3
People in our firm are rewarded equally irrespective of individual performance level. (R)	3.72	1.15	4
We strive to outperform our competitors by providing ambitious individual stretch targets.	3.72	1.06	5
There are non-financial rewards for top performers.	3.67	1.18	6

5. 35: Descriptive Statistics for Removing Poor Performers

	Mean	SD	Rank
Underperformance is not tolerated.	3.48	1.06	1
Poor performers are moved to a new role as soon as a weakness is identified.	3.4	1.12	2
Some workers always just manage to avoid being moved or fired (R)	3.35	1.2	3
Poor performers are rarely removed from their positions (R)	3.34	1.21	4
Poor performers stay in a position a few years before action is taken.	3.32	1.22	5
Poor performers are moved out of the company as soon as a weakness is identified.	3.32	1.17	6

5. 36: Descriptive Statistics for Promoting High Performers

	Mean	SD	Rank
People are promoted primarily on the basis of performance.	3.91	1.02	1
People are promoted primarily on the basis of length of service.	3.7	1.09	2
Our company actively identifies, develops and promotes top performers.	3.58	1.14	3
If two people both joined the company 5 years ago and one was much better than the other, that person would have been promoted ahead of the other	3.5	1.31	4

5. 37: Descriptive Statistics for Attracting Human Capital

	Mean	SD	Rank
Rewards and benefits provided by our company are comparable to that offered by others in the sector.	3.93	1.13	1

We provide rewards and benefits better than our competitors to encourage talented people to join our company.	3.88	1.14	2
Our competitors offer stronger reasons for talented people to join their companies (R).	3.61	1.28	3

5. 38: Descriptive Statistics for Retaining Talent.

	Mean	SD	Rank
My company does little to try and keep top talent (R)	3.7	1.02	1
My company usually works hard to keep top talent.	3.63	1.17	2
My company will do whatever it takes to retain top talent.	3.61	1.09	3
No star performer has ever left the company without someone trying to keep them.	3.58	1.06	4
Some star performers have been persuaded to stay after wanting to leave.	3.54	1.07	5

5. 39: Descriptive Statistics for Constraints on Management

	Mean	SD	Rank
Hiring non-managers with the right skills.	4.59	0.813	1
Training and development of existing employees.	4.56	0.796	2
Hiring managers with the right skills.	4.39	0.825	3
Trade unions.	4.32	0.855	4
Obtaining cost-effective management consultancy.	4.3	0.75	5

Knowing what new management practices to introduce.	4.19	0.892	6
Employment laws and regulations.	4.06	0.833	7
Bureaucracy within the organization's.	4.06	0.855	8

5. 40: Differences across Demographics

	Levene Statistic	Sig.	F	Sig	Results
Number of Employees					
Government and Environment	1.663	.159	.778	.541	No Differences
General Strategy	.200	.938	1.342	.255	No Differences
Strategic Foresight	3.273	.012	4.450	.002	Sig. Differences
Management Practices	.511	.728	.559	.693	No Differences
Management Techniques	.299	.879	.209	.933	No Differences
Firm Performance	.550	.699	.153	.962	No Differences
Number of People Reporting					
Government					No

and Environment	2.182	.037	.796	.591	Differences
General Strategy	2.061	.048	1.146	.335	No Differences
Strategic Foresight	1.599	.136	.662	.704	No Differences
Management Practices	1.569	.145	.289	.958	No Differences
Management Techniques	1.971	.060	1.363	.222	No Differences
Firm Performance	.608	.749	.255	.970	No Differences
Domestic Competitors					
Government and Environment	1.617	.200	.240	.786	No Differences
General Strategy	.682	.507	.156	.856	No Differences
Strategic Foresight	.365	.694	.465	.629	No Differences
Management Practices	2.713	.068	.522	.594	No Differences
Management Techniques	1.383	.253	.041	.960	No Differences

	.144	.866	.024	.976	No Differences
International Competitors					
Government and Environment	.169	.845	.336	.715	No Differences
General Strategy	5.392	.005	2.087	.126	No Differences
Strategic Foresight	4.835	.009	1.076	.342	No Differences
Management Practices	.210	.811	.063	.939	No Differences
Management Techniques	.569	.567	.625	.536	No Differences
Firm Performance	3.886	.022	.729	.483	No Differences
Length of Company Operations					
Government and Environment	.544	.653	.381	.767	No Differences
General Strategy	3.699	.012	1.726	.162	No Differences
Strategic Foresight	2.237	.084	.598	.617	No Differences

Management Practices	1.442	.231	.975	.405	No Differences
Management Techniques	.170	.917	.311	.818	No Differences
Firm Performance	.382	.766	.303	.824	No Differences
Customer Organizations					
Government and Environment	.406	.524	.065	.799	No Differences
General Strategy	.957	.329	4.458	.036	Sig Differences
Strategic Foresight	8.615	.004	4.331	.038	Sig Differences
Management Practices	.341	.560	.021	.885	No Differences
Management Techniques	.884	.348	.006	.938	No Differences
Firm Performance	.057	.811	.072	.788	No Differences
Supplier Organizations					
Government and Environment	1.009	.389	1.825	.143	No Differences
General					No

Strategy	.900	.442	.363	.780	Differences
Strategic Foresight	.656	.580	.401	.752	No Differences
Management Practices	.177	.912	.956	.414	No Differences
Management Techniques	.853	.466	.326	.807	No Differences
Firm Performance	2.353	.073	1.134	.336	No Differences