

**THE IMPORTANCE OF INTEGRATING QUALITY PRACTICES IN TO
STRATEGIC MANAGEMENT: CASE STUDY ON AYKA ADDIS TEXTILE
AND INVESTMENT GROUP**



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**A Thesis Submitted to the School of Graduate Studies of Addis Ababa
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Declaration

I, the under signed, declare that this study entitled “the importance of integrating quality practices in to strategic management in Ayka Addis Textile and Investment Group” is my original work and has not been presented for a degree in any other university, and that all sources of materials used for the study have been duly acknowledged.

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CERTIFICATE

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COLLEGE OF BUSINESS AND ECONOMICS

DEPARTMENT OF MANAGEMENT

MBA PROGRAM

The Importance of Integrating Quality Practices in to Strategic Management:

Case Study on Ayka Addis Textile and Investment Group

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Abstract

The Importance of Integrating Quality Practices in to Strategic Management:

A case study on Ayka Addis Textile and Investment Group

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It is obvious that quality tools are needed because intense global competition, changing customer needs and the changing business environment has forced many organizations to examine their organizational goals and to re-evaluate how to meet these challenges. This extreme global competition has forced many organizations to develop action plans to respond to an increasingly competitive market. One such action plan identified was the integration of quality practices and principles with strategic planning of the industry. The research investigates the importance and usefulness of integrating quality practices in the strategic management process of organizations. The main objective of the research is to explore and present the integration of quality practices into the strategic management process of organizations in the Ayka Addis Textile and Investment Group. Selected quality practices such as TQM, SQM, ISO 9001:2000, Hoshin Kanri and Six -Sigma are identified. These practices are integrating with the strategic management processes of the organizations and empirically tested. The empirical data were obtained from a combination of qualitative and quantitative research methods and the model which is regression analysis and correlation to test the validity, significance and the relationship between the selected variables. The conceptual framework used the variables on quality practices and their integration with strategic planning. The result of this study indicates that there is an integration of quality practices in to strategic management process.

Key words: quality practices, strategic management, Ayka Addis Textile and Investment group

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List of Acronyms

SPSS- Statistical Package for the Social Sciences

SQM- Strategic Quality Management

SWOT- Strengths, Weaknesses, Opportunities and Threats

TQM- Total Quality Management

HP- Hoshin Planning

ISO- International Organization for Standardization

6σ- Six- sigma

CHAPTER ONE

1. INTRODUCTION

1.1. Background

Several organizations fail because they do not take cognizance of the long term benefits of quality practices. They do not realize the value of integrating these quality practices into their routine operations. Hence, this study would endeavor to highlight the usefulness of incorporating quality practices in an organization's strategic management process.

According to Kevan Williams (2009: 7) Strategy is about creating and delivering the future. It is about leading your team or your organization to a future in which you are able to compete more effectively and to achieve prosperity and sustainability. The skills of strategic management are applicable to those leading a team or planning the direction of any size of organization in all sectors—private, public, and voluntary.

Strategic management has become one of the core functions of organizations. Lumpkin and Taylor (2004:8-12) revealed that in order for organizations to be competitive and sustainable in the long term, they need to have a clear understanding of their goals and strategies. They believe that this can be achieved by using strategic management as a tool and that it provides a means for organizations to coordinate their functions and resources to achieve prescribed strategies according to an environment in which the organization may find itself. In this way the organization can not only adapt to the changing environment, but can also gain a competitive advantage.

Kevan Williams (2009: 7) proposed that *Strategic Management* is for those taking, or wanting to take, their first steps to developing and implementing strategic changes. It gives you the tools you need to make effective strategic decisions, by helping you analyze your organization and the

world it operates in, plan your strategic approach, and implement the changes. It provides insight into how to gain a competitive advantage, which is at the heart of good strategy.

Van Eeden and Venter (2003:13-19) defined strategic management is concerned with the analysis of strategic goals along with the internal and external environment of an organization.

Grant (2005:1-11) proposed that strategic management is a process of defining the purpose and achievements of an organization. He also mentions that each organization should have a strategic focus, if it intends to survive and flourish in the long term. It is evident from the review above that these authors are in agreement that strategic management is essential for the sustainability of an organization.

According to Cleveland (2006:1-14) successful organizations consistently use quality practices as a tool to formulate, enhance strategies and set goals and objectives. He stated that many organizations may have overlooked the importance of quality practices in developing relevant strategies.

Lakhal, Pasim and Limam, (2006:625-646) express that quality practices follow a structured, systematic process involving all employees of the organization in its planning and implementation efforts. To support this, quality experts have introduced a number of quality tools such as Total Quality Management (TQM) and Strategic Quality Management (SQM) to name but a few, to implement and improve processes in order to enhance the quality of a product or service in an organization. Leonard and McAdam (2002:507-522) argue that SQM is a useful tool to develop a comprehensive framework for developing business objectives and to improve quality efforts. Godfrey (2006:24-38) states that over the past few years there has been an increase in the emphasis on SQM.

In addition, quality tools such as Hoshin Planning, ISO series, Continuous Improvement and the Six Sigma can be applied to solve problems and to improve quality within organizations. Brown (2005:209-222) states that not only should quality practices be linked with the strategic planning process but it should receive organization-wide commitment.

The above review shows that quality makes excellent business sense for organizations to recognize that the key to performance excellence is to incorporate quality practices into their organization's strategic and operational plans. As a result, strategic quality planning should determine a customer-focused vision, state the objectives, as well as integrate quality practices into the organization's strategic and annual business plans. It can be concluded that quality practices, are of very useful to the success of an organization and strategic management is essential for the sustainability of an organization.

1.2. Statement of Problem

Lee (2007:9-24) stated that in 1980, the Chrysler corporation was close to bankruptcy. This was due to the quality problems experienced with their new fleet of cars. In 1990, under the supervision of a newly appointed vice president, Chrysler changed their strategic management style. The organization focused on their missions, goals and strategies to determine the root cause of their problems. One of the ways in which they overcome their problems was by evaluating their purpose in the motor industry. Chrysler then developed a mission statement which introduced them as one of the premier automotive organizations based on their quality efforts. Almost half of their employees were involved in quality teams. But they experienced no change in results, in cost structure, customer satisfaction and in market share. It did not take long to discover that the root cause of their problems was that there was no real strategic or quality plan.

Furthermore, employees throughout the organization did not know which activities were important and did not prioritize urgent ones. The activities were not aligned with key strategies. Improvements were not linked to provide meaningful results across critical processes. Even at senior levels, they had no clear agreement on important priorities. However, new efforts were introduced later and they improved quality and have subsequently made Chrysler one of the top ten automotive organizations in the motor industry (Lee, 2007:9-24). Gale (2006:1-11) explains that in 2002, Toyota had experienced similar difficulties as Chrysler, with the quality of some of their cars. After redirecting their strategic goals, Toyota became a very successful organization throughout the world in terms of their quality and excellence.

Hence, the above two literature shows that there has been a lack of implementation of quality practices, poor development of strategic management, no linkage between strategic level and the workers even if they are involved quality teams and ineffective quality plans.

As a result, this has led to poor alignment between strategic management and organizational goals and eventually it leads to poor performance in business. [Lee (2007:9-24), Gale (2006:1-11) and Godfrey (2000:24-38)] emphasize the contention that serious quality problems existed because of inadequate strategic management. Perhaps organizations need to accept the usefulness of existing and emerging quality practices for application in their organization's strategic management processes.

Even though different researchers were undertaken the research on the integration of quality practices in to strategic management, there is no investigation was undertaken in Ethiopia and many company in Ethiopia did not implement the new philosophy of quality, since most of quality practices were developed in outside country like Japan, Chinese, etc. Thus, it was appropriate to study the importance of integrating quality practices in to strategic management process.

Therefore, the researcher wants to assess by examining most common elements of strategic management processes and then investigates how quality practices can be integrated with strategic planning process in Textile industry (Ayka Addis Textile and Investment group).

1.3. Objectives of the Study

General Objectives

The aim of this study is to evaluate the importance of quality practices during an organization's strategic planning process.

Specific objectives includes:-

- To analyses the relationship between quality practices and strategic management.
- To identify which quality practices are integrated in to strategic management process.
- To develop an understanding of the use of quality practices when it integrated in strategic management process.
- To show the alignment between the quality practices and strategic management in textile industry.

1.4. Research Question

The research question to be research within the extent of the research, reads as follows:

Generally:

“What actions are required for the integration of quality practices with in strategic management to be successfully performed in all operation of the textile industry?”

Some of the specific research questions are:

- What are the challenges facing textile industry when the organization implementing quality practices?
- Is there lack of successful practices of quality management within textile industry due to internal or external factors?
- Is there a proper implementation of quality practices in the organization?
- Is there a successful integration of quality practices in to strategic management?
- What are the uses when the industry is incorporate quality practices in the strategic management?
- What tools of quality management are being used in Ayka Addis Textile and Investment Group?

1.5. Research Hypothesis

Hypothesis can be defined as a logically inference relationship between two or more variables expressed in the form of a testable statement. Relationships are guessed on the basis of network relations established in the conceptual framework formulated for the research study. In this particular study, independent variables (quality practices) are measured to see if it has any relationship with dependent variable (strategic management).

Main hypothesis- There is a significant integration between quality practices and strategic management in Ayka Addis Textile and investment Group.

H1- there is a strong integration between TQM and strategic management in Ayka Addis Textile and Investment Group.

H2- there is a significant integration between six sigma and strategic management in Ayka Addis Textile and Investment Group.

H3 – there is a significant integration between hoshin planning and strategic management in Ayka Addis Textile and Investment Group.

H4- there is a significant integration between SQM and strategic management in Ayka Addis Textile and Investment Group.

H5- there is a significant integration between ISO 9001:2000 and strategic management in Ayka Addis Textile and Investment Group.

1.6. Significance of the Study

As to knowledge of the researcher, there are no previous studies done on the use of integrating quality practices in to strategic planning in industry sector in our country. Thus, the significance of this study is that it sheds light on the extent of quality practices and strategic management process in Ayka Addis Textile and Investment Group. Its output would contribute a lot to those parties who have similar objectives and seek information on issues related to the study under investigation. The results of the study will serve as input for the organization to assist in decision making, in identifying key work places issues in order to develop strategies to address and increase the integration of quality practices in to strategic management. By understanding their perspectives, the industry management can derive ways to improve employee productivity. By conducting this study, the finding should help both management and employees of the industry to understand the importance of quality practices when it incorporates in to strategic management process. Finally, this research would enhance the practical knowledge of the researcher through creating a link between the theoretical knowledge of performances and competitive advantages and what is going on real life business.

1.7. Scope/Delimitations

The research would be homogenous in nature. The researcher believes that it would be appropriate to conduct the study in large scale. However, the limited time and other resources do not allow doing so. Hence, the study was confined only to Ayka Addis textile and Investment Group. The conceptual scope of the study was therefore, limited to examine the extent to which the importance of incorporating quality practices in strategic management in this textile industry. As a project is intended to get an in depth investigation of the problem in a single industry, the result cannot be recommended to other industry with in different situations.

1.8. Organization of the Paper

The study is organized in to five chapters. The first chapter deals with introduction: background of the study, statement of the problem, objectives, significance, research question, hypothesis and delimitation of the study. The second chapter contains review of related literature with conceptual framework. Chapter three deals with methodology of the study. Chapter four also focused on analysis and interpretation of the data collected through questionnaire. Finally, conclusion and recommendation of the study were given in chapter five.

CHAPTER TWO

2. LITERATURE REVIEW

2.1 The Definition and Evolution of Strategic Management

According to Grant (2005:1-11) the purpose of strategic management is to match an organization's strategy, with the business environment that it is associated with. He also states that strategic management is a process by which an organization manages the formulation and implementation of its strategy. Carpenter and Sanders (2007:7) indicate that there were some criticisms of strategic management. They state that some critics claim that there is insufficient theoretical knowledge of strategic management to help managers make important decisions. The complexities arise because the environment is permanently changing and effective strategic management requires a continuous flow of theories that suitable for new circumstances.

In order to know more about the importance of strategic management, it is useful to provide a historical perspective of the origins and development of this discipline. Strategic management has been enriched over the last twenty four years with conceptual frameworks and research findings from a number of different disciplines. More recently, strategic management has begun to develop its own body of knowledge and hence greater sophistication can be seen in strategic research.

In the 1970s strategic planning began focusing on both the external factors such as the market and its competitors, and internal factors such as the functional activities. It evolved in the 1980s to strategic management and included both the planning and the implementation phases. Strategic plans of the past usually ranged from three to five years. Some organizations could even use these strategies successfully for ten years. This is

seldom possible today, because of the rapid change in the business environment (Ginter and White; 1992:253-261).

Van Eeden and Venter (2003:23-29) inspire the view that strategic management encompasses more than just the management of strategic decision making. Robinson (2005:1-3) supports Van Eeden and Venter (2003:23-29) and proposes that strategic management provides a discipline that enables senior management to actually step back from daily activities, to consider the future of their organization. Tabije (2007:2-4) contends that each organization's experience with strategic management is unique, reflects on the organization's distinct culture, environment, resources, management style and other organizational features.

According to Vinzant and Vinzant (1999:516-531) strategic management has evolved from an early emphasis on planning to become a comprehensive management approach. This helps organizations to align their organizational direction with their organizational goals and objectives to accomplish strategic change.

In general, Ginter and White (1992:253-261), Van Eeden and Venter (2003:23-29), Robinson (2005:1-3) Vinzant and Vinzant (1999:516- 531), and Tabije (2007:2-4) are in agreement that the strategic approach is oriented toward the future. They recognize that the environment will change. This approach leads the manager to ask where the organization wants to be after a certain period, what it will need to get there, how to develop strategies and finally, how to manage those strategies to achieve the organization's goals and objectives. They also recognize that the future cannot be controlled, but the argument can be made that by anticipating the future, organizations can help to shape and modify the impact of environmental change by implementing improved strategic management processes.

2.2 Advantages of Strategic Management

2.2.1 Aligning Organizational Goals and Objectives

Hill and Jones (2007:7-8) define strategic management as the science of formulating, implementing and evaluating cross functional decisions which will enable an organization to achieve its objectives. It is a process of specifying the organization's goals and objectives, with a view to developing policies and plans to achieve these goals and objectives. Venter (2006:28) pointed out that strategic management is an ongoing process that assesses the market in which the organization is involved, evaluates its competitors and then sets goals and strategies to meet all existing and potential customer needs. Hence, this idea indicates that successful organizations have the ways to ensure that their organizational goals and objectives are aligned with the organization's mission to accomplish the strategies.

Robinson (2005:4) further elaborates that strategic management provides a means to measure the progress of the organization. A method of achieving this is for an organization to set objectives and measure their success against these objectives to determine gaps. Therefore, determining the gaps in objectives can lead to improvement of the strategies.

2.2.2 Scanning the Environment using a SWOT Analysis

According to Morrison (1992:2) environmental scanning, refers to the organizational practice of scanning, identifying and analyzing the external environment, such as issues, trends, threats and opportunities, as part of a larger process of strategic decision making. In order to understand the external forces of change, organization has to scan the environment, so that they may increase effective management that secure or improve

their position.

David (1997:105-111) states that, the strategic management process is based on the belief, that the organization should monitor internal and external events and trends so that timely changes can be made as needed. Vinzant and Vinzant (1999:516-531) summarizes the view that this process is advantageous and it can help organizations to cope successfully, with the complexity of the environment and with change. Therefore in order to survive in the long term, every organization should be capable of definitely identifying and adapting to environmental change.

Strategic management provides a vision of the future clarifies threats and opportunities and determines methods to lever strengths and mitigate weaknesses (David, 1997:105-111). This can be achieved by identifying strengths, weaknesses, opportunities and threats, termed SWOT analysis (Hill and Jones, 2007:7-8). They confirm the beliefs of David (1997:105-111) that the SWOT analysis scans the internal and external business environment as well as identifies strategies that align the organization's resources and capabilities, to the demands of the changing environment.

Hence, scanning the environment provides a strategic idea that is useful in shaping organizational strategies. The results of scanning includes; fostering an understanding of the effects of change on organizations and bringing about expectations of change, to bear on decision making.

2.2.3 Gaining a Competitive Advantage

Calcagno (1996:2) and McCell (2000:4-13) believe that a competitive advantage is obtained as the result of an organization's planned strategy. The strategic direction is realized for the organization to produce greater profits than their competitors. Many

factors are equally important in producing a position of success.

The study of mechanisms responsible for creating a sustainable competitive advantage provides many interesting opportunities, to investigate the factors for the organization's competitive success. Kelemen (2003:41-45) explains that strategic management is considered as a useful tool for gaining a competitive advantage. This competitive advantage enables organizations to survive against its competition in the long term. Vinzant and Vinzant (1999:516-531) are also in agreement with this opinion and express that it encourages managers to focus on plans to compete successfully and be sustainable in the market. McCell (2000:4-13) claims that changes in local and international markets and increased competition have forced organizations to re-evaluate their competitive strategies.

In generally, Hill and Jones (2007:7-8), Venter (2006:28), Robinson (2005:4), Morrison (1992:2), David (1997:105-111), Vinzant and Vinzant (1999:516-531), Calcagno (1996:2), Kelemen (2003:41-45) and McCell (2000:4-13) express the philosophy that the effectiveness of strategic management must be assessed based on the degree to which it enables organizations to accomplish strategic goals and objectives. Hence, it is important for organizations to establish actions; such as aligning their organizational goals and objectives with strategic plans and objectives, taking cognizance of competitors and conducting a SWOT analysis to scan the internal and external environment, with the view that the decisions can be adjusted over time, to ensure that the organization achieves its desired goals and objectives.

2.3 Disadvantages of Strategic Management

2.3.1 The Lack of a SWOT Analysis in a rapidly Changing Environment

Madu, Aheto, Kuei and Winokur (1996:57-72) assert that in a competitive environment, quality is the key to an organization's survival and success. It is clear in today's turbulent environment that an organization's survival depends on the ability to satisfy customers' needs and wants and to compete in globally changing environments. But, to compete effectively, the organization must respond to the dynamic changes in its internal and external environment.

This is evident from Xerox Copiers. In the late 1990s, they did not identify that the demand for copiers were increasing due to changing technology. This resulted in a decrease in sales from 85% to 70%. Madu, Aheto, Kuei and Winokur (1996:57-72) are of the opinion that this occurrence was due to the organization's lack of adherence to a SWOT analysis.

According to Strickland, Thompson and Gamble (2001:26) profitable organizations must be willing to make changes while they are still successful, that is, before any major environmental change becomes imperative for survival. Mintzberg (2000:24) reminds us that the purpose of strategic management is to match an organization's strategic with the environment it is in. He adds that due to the constantly changing environment, effective strategic management requires a continuous flow of new theories suitable for the new and changing environment.

Therefore, the literature above preserve that, organizations have to deal with dynamic and uncertain environments. The authors cited in the above are in agreement with the organization should actively and continuously look for opportunities to exploit their

competencies and strategic abilities, adapt and seek improvements in every area of the operations.

Hill and Jones (2007:132-134) state that organizations find it difficult to change their strategies in order to adapt to a changing competitive environment. They use the International Business Machines (IBM) Corporation as an example to explain this problem. For 30 years IBM was viewed as the world's most successful computer corporation. Then in a space of a few years they ran at a loss of \$5 billion. International Business Machines problems were caused by a dramatic decline in the cost of computing power. Customers were changing from mainframe computers to personal computers. International Business Machines (IBM) did not anticipate this change or even attempt a SWOT analysis to prevent such a loss. Hence, their lack of response to the changing environment resulted in their downfall.

This paradigm serves to highlight the usefulness of organizations to be perceptive not only in the environment in which they operate but also to the potential environment which could emerge.

On the contrary, Robinson (2005:1-3) expresses the argument that the major disadvantages of strategic management is that it requires the organization to anticipate the future environment in order to develop strategic plans. He believes that if the future does not unfold as anticipated, then it may invalidate the strategies already taken. Most critically, management should acquire the ability to predict environmental reaction, develop multiple strategies and manage change. Thus, Madu, Aheto, Kuei and Winokur (1996:57-72) prove that organizations planning for their future survival should be flexible and willing to accept change as inevitable.

2.3.2 The Changes that Occur in Strategic Plans

It can be inferred that changes in strategic plans can result in poor decision making and lack of proper strategic management procedures. Therefore there is an old adage which Mintzberg (2000:22) quotes “if you fail to plan, you are planning to fail.” Several reasons can be investigated as to why strategic plans fail. Grant (2005:3-11) identifies some of the reasons why strategic management initiatives fail. These include the failure to understand the customer and the inability to predict environmental change. Tang and Bauer (1995:5-14) are of the view that most organizations do not have explicit operational strategies even though the importance of these strategies are needed. Crowe and Cheng (1996:35-48) support Tang and Bauer (1995:5-14) opinion and elaborate that one of the most important reasons for the latter is the lack of a practical and powerful methodology or practice to translate corporate strategies that lead to overall organizational success.

Tabije (2007:2-4) proposes that in order for strategic management to be a success, organizations must not fail to follow the strategic plan. This is evident from Hewlett Packard, where strategic planning is executed at senior management level and is communicated to middle management and subordinates through the organization's internal mail. In this example, the strategic plans perhaps failed because of a lack of commitment and visibility from senior management and their inability to communicate effectively. Another disadvantage is failure to obtain employee commitment. Employees are always resistant to change because there are no incentives given to them to embrace the new strategic plans.

Eventually, Friday-Stroud and Sutterfield (2007:561) state that the effectiveness of

strategic plans must be assessed based on the degree to which it enables an organization to accomplish strategic goals and objectives. Hence, it would be desirable to establish some measures of strategic management so that the plan might be adjusted through time to ensure that it achieves its desired goals and objectives.

Mintzberg (2000:22), Grant (2005:3-11), Tang and Bauer (1995:5-14), Crowe and Cheng (1996:35-48), Tabije (2007:2-4), Friday-Stroud and Sutterfield (2007:561) have contributed to the discipline of strategic management and maintain that, the overall success of an organization needs to be conceived through proper planning processes and those plans should involve all functional areas of the organization. For strategic management to be completely successful, organizations might not fail to follow the plan. They should be guided by the set of objectives that they have formulated, envisioning a prosperous business. Strategic management should incorporate open communication channels between senior management and employees and should strive to understand customers more thoroughly.

In addition, Mintzberg (2000:22), Grant (2005:3-11), Tang and Bauer (1995:5-14), Crowe and Cheng (1996:35-48), Tabije (2007:2-4), Friday-Stroud and Sutterfield (2007:561) contend that a lack of a SWOT analysis could lead to devastating results for the organization. It can be inferred from their work that management should acquire the ability to predict potential environmental change and manage these changes accordingly. Because of the strong competition in today's dynamic and ambiguous business environment, it is imperative that managers find ways to differentiate their organizations from competitors. It is clear that in a rapidly changing environment an organization's survival depends on its ability to conduct a SWOT analysis, satisfy customers' needs and to compete effectively in global and domestic markets. Though, to

compete effectively, the organization must respond to the dynamic changes and embrace it.

Lumpkin and Taylor (2004:8-12) report that many employees have failed in their attempt to bring quality practices to their organizations. This is because these organizations did not embrace quality management practices as a fundamental value. Hence, efforts made to bring quality into the organization inevitably result in limited success. They recommend that success will be achieved only when organizations integrate quality into their strategic planning process. Calingo (2000:19-37) is of the opinion that the advancement of strategic management over a period of time, covering the latter part of the twentieth century, paved the way for the evolutionary development of quality management practices.

All the literature above attempts to show, how, combining various strategic management principles with quality management practices increases the likelihood that managers will make better decisions. This in turn will lead to increased product and service quality and improved performance, which will ultimately lead to greater income.

2.4 The Evolution and Integration of Quality Practices into the Strategic Management Process

Raghunathan, Rao and Solis (1997:192-200) impart the knowledge that the demand for quality is emerging as one of the most critical factors for organizations to survive in the expanding and competitive marketplace. Juran (1989:3) states that “just as the twentieth century was the century for productivity, the twenty-first century will be the quality century.” Evans (2000: 18) found that the most consistent factor among organizations is an obsession with some form of quality. Managing the quality dimensions of an

organization is not different from any other aspect of management. It involves the formulation of strategies, setting goals and objectives, developing action plans, implementing plans and using control systems for monitoring and taking corrective action.

Quality management practices are contingent on an organization's strategic management in terms of decision processes. Quality management in organizations involves strong leadership and strategic planning, which is subsequently supported by a management system. Parast and Digman (2007: 802-818) express that quality management has been recognized as a comprehensive management paradigm for enhancing organizational performance and competitiveness.

Therefore, it is anticipated that quality practices be integrated with strategic management processes. This is supported by Lakhal, Pasin and Limam (2006:625-646) that the integration of quality management practices and strategic management provides a synergistic combination that is far more powerful than either of them being operated separately. Grant (2005:1-11) suggests that even when organizations follow sound management practices, they are still exposed to events and problems that can cause strategic failure. In addition, David (1997:110) is of the opinion that the low success rate of organizations is further fuelled by poor quality management practices. DeFoe and Janssen (2001:4-6) are of the view that by integrating quality practices into the strategic management process, it becomes part of a foundation that is essential in supporting the management of quality in an organization.

Grant (2005:1-11) also proposes that strategic management is a process of defining the purpose and achievements of an organization. Cleveland (2006:1-14) is of the opinion that successful organizations consistently use quality practices to formulate

strategies and to set goals and objectives. Bossink (2002:170-186) is in agreement with Cleveland (2006:1-14) and finds that quality practices support the management of strategically important innovation processes.

In addition, Parast and Digman (2007:808-813) suggest that their studies have shown that quality practices have a strong effect on organizational and operational performance. They also add that many studies have investigated the effects of various quality management practices on operational and organizational performances and this is shown in the following section on the advantages of using quality tools and practices in the strategic management process.

Though, Allen and Kilmann (2001:110-131) explain that various quality practices have been identified over the years. Zhao, Yeung and Lee (2004: 575-587) state that quality practices have become one of the most widely accepted philosophies in organizations and one of the most popular research areas in recent years.

Calingo (2000:19-37) identifies organizations such as Hewlett Packard, Xerox Copiers and Corning Glass, as those organizations which successfully implemented the integration of quality practices with strategic management processes. The key to their success was an understanding of quality practices and the ways in which they can be integrated into organizational strategies.

Tan, Kannan, Handfield and Ghosh (2000:174-182) confirm that quality management practices have played an increasingly prominent role in the strategic planning process. In addition, Ittner and Larcker (1997:293-314) believe that a key assumption in the strategic planning process is a need to align specific quality practices with the organization's chosen strategy. They employ data from the automotive and computer industries in Canada, Germany, Japan and the United States and have examined

whether organizations following the integration of quality practices and strategic management, have adopted the strategic processes required. Results indicated that organizations that plan with more emphasis on quality in their strategic plans tend to make greater use of strategic quality management. The data presented from the automotive and computer industries shows the positive effects of integrating quality practices into strategic management.

Aravindan, Devadasan and Selladurai (2001:79-96) explain that the quality and strategy integration occurs when top management has translated the fundamentals of quality practices into at least four strategic planning objectives, such as:

- Continuous improvement in quality products and services
- Greater responsiveness from the manufacturing department
- Greater flexibility in adapting to customer needs
- Cost reduction through improved quality and waste elimination

They conclude that this process of integration works best when quality goals, organizational strategies and other quality tools are completely included in the organization's strategic plan.

2.5 Advantages of Using Quality Tools and Practices in the Strategic Management Process

2.5.1 The Advantages of Total Quality Management (TQM)

Total Quality Management is a world renowned practice. A TQM-based organizational strategy is defined by Oakland (2003:56) as a strategy based on a philosophy of continuously improving organizational processes, in response to a demanding and changing environment.

McCell (2000:4-13) expresses the opinion that many organizations have overlooked the importance of TQM in developing relevant strategies to gain a competitive advantage. Further, Stevenson (2005:398-401) refers to TQM as a quest for quality in an organization which leads to continuous improvement.

Svensson (2006:22-29) claims that TQM practices have gained an increased interest since the 1990s. Total Quality Management has become well established as a system for improving both the performance of organizations and customer satisfaction during the 21st century. Total Quality Management can also be viewed as an organization wide philosophy requiring all employees at every level of an organization to focus their efforts to help improve each activity of the organization. Kenyon (1997:7) exclaims that TQM represents a core aspect of selected Japanese organization's management system and is stated as the means by which the overall control system and TQM are deployed. This was further adopted by Xerox Copiers through benchmarking. They identified the success of other organizations and realized their deficiencies by integrating TQM with their strategic initiatives.

Leonard and McAdam (2004:254-266) express the perspective that the task of improving and ensuring superior quality is the responsibility of everyone in the organization. The employees in the organization are required to make quality a culture in their daily lives. Furthermore, it is also important to understand that TQM is a long term perpetual improvement process requiring significant resources. It is a continuous effort with no deadlines or target dates. Hence, TQM becomes a way of life.

It is inferred by Oakland (2003:56), Svensson (2006:22-29), Leonard and McAdam (2004:254-266) that TQM plays a crucial and significant role in the strategic management process of an organization. Mehra, Hoffman and Sirias (2001: 855-876)

propose that TQM concepts be applied to implement sustainable strategic initiatives which provide a competitive advantage.

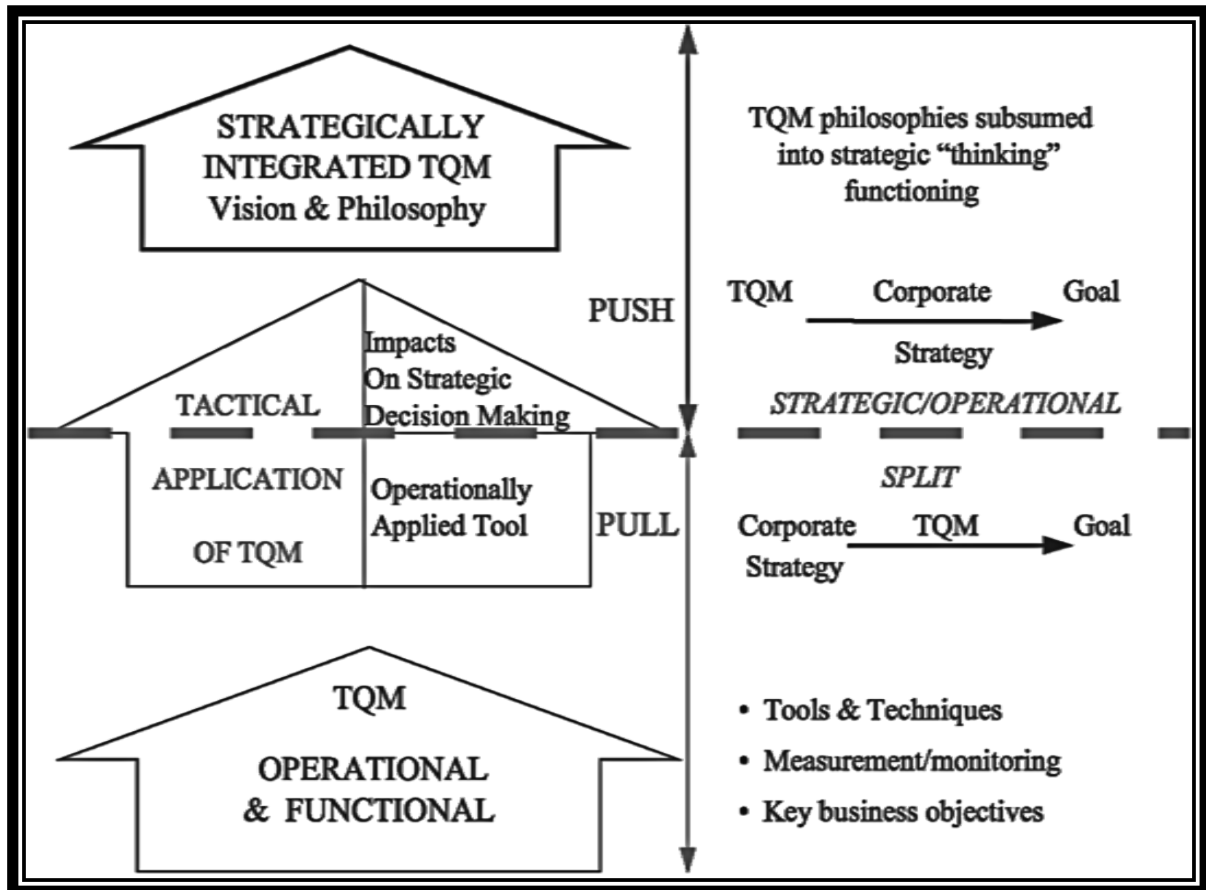


Figure 1 – The integration of TQM in strategic management decisions (adapted from Lakhal, Pasim and Limam, 2006:625-646)

Figure1 indicates the usefulness of TQM philosophies within the strategic planning process.

Oakland (2003:56), Svensson (2006:22-29), Leonard and McAdam (2004:254-266) and Mehra, Hoffman and Sirias (2001: 855-876) have even argued that without sustainability, TQM initiatives are usually doomed to fail, since the essence of TQM is a continuous improvement and the integration of quality practices into daily

organizational and operational strategies. From the literature above it is evident that it is advantageous to integrate selected quality practices into the strategic management process in order to gain a competitive advantage, continuous improvement and sustainability in the market.

2.5.2 The Advantages of Hoshin Kanri

Another tool which can be used to integrate quality practices in strategic management is Hoshin Kanri. According to Akao (1991), the word hoshin is composed of two Chinese characters: ‘*ho*’ and ‘*shin*’; ‘*ho*’ meaning method or form, and ‘*shin*’ meaning shiny needle or compass; ‘*kanri*’ meaning management or control. Taken together the two words mean a ‘methodology for strategic direction setting’. Zairi (2006:149-159) describes a technique for strategic planning, known as Hoshin Kanri, which has been in operation in many organizations since the 1960s.

Zairi and Erskine (2004:40-53) define Hoshin Kanri, as a systematic quality approach to planning, auditing and managing corporate visions and organizational strategies. According to King (1989), the key to hoshin planning is that it brings the total organization into the strategic planning process, both top-down and bottom-up. It ensures that the direction, goals, and objectives of the company are rationally developed, well defined, clearly communicated, monitored and adapted based on system feedback.

Tennant and Roberts (2000:77-90) disseminate the theory that Hoshin Kanri does not replace other management strategies. It is a type of strategic planning system that orchestrates continuous improvement and breakthroughs. It selects areas that need improvement, makes certain that the right people get involved and that the improvement is implemented.

There are 5 elements of Hoshin Kanri Planning. They are as follows:

- Focus for the organization in the form of a few breakthrough goals that are vital to the organization's success
- Commitment to customers, meeting the needs and expectations that customers rank as most important
- Deployment of the organization's focus so that employees understand specific contributions to it
- Tools and techniques that are helpful and easy to implement such as quality tools
- Ongoing evaluation of progress to facilitate learning and continuous improvement

The following diagram (Figure 2) illustrates the Hoshin Kanri process implemented by Procter and Gamble Soap Division.

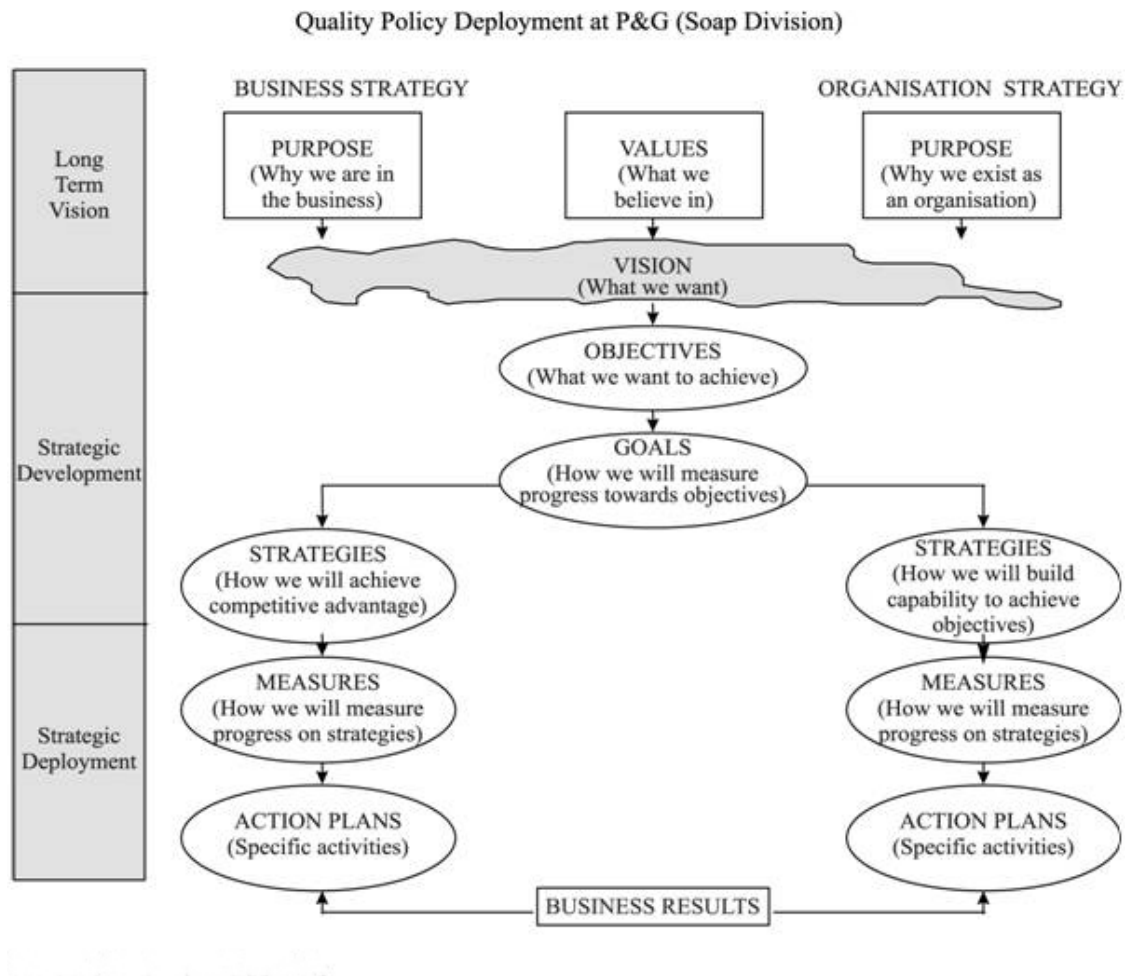


Figure 2 – Hoshin Kanri Process (adapted from Zairi, 2006:149-159)

Figure 2 shows the Hoshin Kanri planning process of Procter and Gamble Soap Division and illustrates how quality is deployed in their strategic management process.

Hoshin Kanri acts as a management compass that steers everyone in the organization in the same direction, toward a common goal. Therefore it can be concluded that the Hoshin Kanri system contributes to continuous improvement in strategic management.

2.5.3 Advantages of ISO 9001:2000 Certification

The ISO 9001:2000 code of practice provides another quality tool which can be used in the strategic management process. Peter K.C, (2008) elaborates that ISO 9000 is a family of

standards that defines the guiding principles of quality management, lists the certification requirements, and provides guidelines on how to establish systems for managing procedures and product/service quality. It aims to facilitate global trade and improve organizational effectiveness. Allen and Kilmann (2001:110-131) identify five key areas related to quality which can be included into the strategic management process:

- The development of a continuous improvement culture throughout the organization and strategic integration
- The deployment of quality practices in functional levels of the organization
- Customer focused strategic planning
- Most effective competitive strategy for sustaining organizational performance planning
- Gaining a strategic advantage
- A level of priority given to continuous improvement

In addition, these characteristics are consistent with the principles of ISO 9001:2000. The focus on the ISO 9000 series was initiated in 1987 by the International Organization for Standardization. It has been revised in 2000 and 2008. Hence, ISO 9001: 2000, intended to be more structurally sound and user friendly (Peter 2008). ISO 9001 involves a third-party registration by certifying an organization against the requirements of a quality management system. Terziovski and Samson (1999:393-409) found that high performing organizations focus on quality practices such as breaking down barriers between functional levels, continuous improvement and ISO 9001 certification. They contend that an integrated quality strategy involving TQM and ISO 9001 certification is the most effective competitive strategy for sustaining organizational performance.

2.5.4 The Advantages of Strategic Quality Management (SQM)

Strategic Quality Management can also be regarded as a useful tool during the integration of quality practices and strategic management. Brown (2005:209-222) introduces the framework of SQM emphasizing that quality must be defined from the customer's point of view. He elaborated that quality practices should be integrated with the strategic planning process. Furthermore, this integration requires organization wide commitment.

Leonard and McAdam (2002:507-522) proclaimed the concept that SQM consists of a comprehensive framework for developing organizational objectives and improving quality efforts. Calingo (2000:19-37) defines SQM as the formulation and deployment of quality management within the overall framework of strategic planning. Under this framework, each strategic change is evaluated in terms of how compatible it is with the process, the organization and the environment. Cost of quality, quality function deployment, target analysis and other quality management mechanisms are presented under this framework. The use of these mechanisms is a practical way of deploying SQM, thereby making quality management practices more effective and successful.

In the early 1980s, the success of Japanese products such as Toyota in the US market encouraged American manufacturers to adopt Japanese practices in a quest to improve their quality and lower their costs. Another benefit of SQM is that it enables an organization to present information on product or service to customers for extensive market research in an attempt to determine if the organization satisfies all the customers' needs or if they may have omitted desired needs.

Aravindan, Devadasan and Selladurai (2001:80-94) assert that SQM consists of three phases which can be included in the integration of quality management and strategic management. The three phases of SQM are:

- The quality concepts are integrated into the vision and goals of the organization
- The formulation of the policies and actions required for managing change
- The deployment of the strategy

It is clear that the strategic aspects of quality are recognized and embraced by top management in the strategic planning process. Instead of viewing quality in a defensive way, quality can now be used to maximize an organization's competitive opportunities.

As a result, Tummala and Tang (1996:8-36) conclude that quality needs to be defined from the perspective of the market competition and the customer's expectation, instead of in terms of predetermined, internal standards or design specifications. They add that in order to reach this step in the move toward quality, the organization requires a change in corporate culture and an organizational commitment to continuous improvement.

The above literature illustrates that quality can be redefined with regard to the customer perspective and market competition. The need for flexibility in operations and for increasing awareness and skill on the part of employees and employers has possibly also made the empowerment of the employees in the workplace necessary.

2.5.5 The Advantages of Six Sigma (6σ)

Mikel (2000:46) defines Six Sigma (6σ) as a business-driven, multi-faceted approach to process improvement, reducing costs and increasing profits. The primary goal is to

improve customer satisfaction and thereby profitability, by reducing and eliminating defects.

The Six Sigma model is a highly disciplined approach that helps organizations focus on developing and delivering “near perfect” products and services. The word Sigma is a Greek letter used for a statistical term that measures how far a given process deviates from perfection. The higher the Sigma number, the closer the perfection. The central aim of Six Sigma is that it can measure how many defects there are in a process and determine how to eliminate those defects in order to get as close to zero defects as possible (Harrold, 1999:37). Evidence from an aircraft manufacturer shows that the current average organization operates on Four Sigma which corresponds to 6210 defects per million. This can be interpreted as 6 defective aircrafts out of 1000 aircrafts.

When implementing Six Sigma, fewer than 3.4 defects per million can be achieved. It can be inferred as 0.00034 defects out of every 1000 aircrafts. To obtain these results, processes were optimized, process capability improved and the defects per million dropped to 0.00034. This indicates that the quest for zero defects led to superior quality products and, hence, it can be deduced that zero defects is a strategic goal that can lead to continuous improvement and customer satisfaction.

The Six Sigma approach above was originally developed by Motorola to systematically improve processes by eliminating defects. The success of Six Sigma as a quality tool can be seen in the example below:

The integration of quality concepts into the vision and goals was Motorola’s Six Sigma quality initiative to reduce defects in their products to under 3.4 defects per million. Motorola’s Six Sigma quality initiative has been one of the driving forces in

achieving this goal (Jaideep, 1999:43).

Furthermore, Friday-Stroud and Sutterfield (2007:562) explain that the basic principle of the Six-Sigma approach as a managerial decision making tool and includes the following:

- Aligning key business processes and customer requirements with the organization's strategic goals
 - Identifying corporate sponsors to champion projects, supporting the team, obtaining necessary resources, and helping organizational members to overcome the resistance to change
- Instituting a standard measurement system to be used throughout the organization
- Identifying appropriate measures that focus on organizational results and accountability
- Providing extensive six-sigma and project management training
- Deploying appropriately trained teams to improve quality and profitability while reducing time and waste
- Setting improvement goals

DeFoe and Janssen (2001:4-6) state that by incorporating an initiative like Six Sigma into strategic management, it will enable an organization to plan and execute breakthroughs. Over the long term, the effect is to achieve competitive advantages. There are similarities and differences between Six Sigma and TQM. The similarities are: customer interaction, the environment in which the organization operates customer satisfaction, cost reduction and increased profitability (Friday- Stroud and

Sutterfield, 2007:562).

Six -Sigma is similar to TQM in its focus on techniques for solving problems and using statistical methods to improve processes. However, TQM emphasizes organization wide involvement, the Six Sigma approach is to train experts who work on solving important problems while they teach other employees in the organization to implement quality improvements.

Six-Sigma is a powerful approach to achieve breakthrough improvements in manufacturing, engineering and organizational processes. The approach relies heavily on advanced statistical methods that complement the process and product knowledge to reduce variation in processes. It is a new way of operating a business that would eliminate the existing defects efficiently and would prevent defects from occurring in the future. Different strategies are used by organizations to introduce and deploy Six Sigma approaches. Each of these strategies has advantages and potential failure modes that must be addressed and avoided.

It is evident from the advantages of integrating quality practices into the strategic management processes of an organization that the aim of the integration is the sustainability of an organization, gaining a competitive advantage and most importantly, the need for continuous improvement is encouraged. This can be achieved only with an organization-wide commitment.

It has been established by Oakland (2003:56), Svensson (2006:22-29), Leonard and McAdam (2004:254-266), Mehra, Hoffman and Sirias (2001:855-876), Zairi(2006:149-149), Allen and Kilmann (2001:110-131), Terziovski and Samson (1999-393:409), Aravindan, Devadasan and Selladurai (2001-80-94), Friday- Stroud and Sutterfield (2007:562), DeFoe and Janssen (2001:4-6), Sharma and Gadenne(2001:433-445)

and Chin, Tummala and Tang (2002:213-218), that the synergy between the quality practices mentioned above and strategic management have been identified and does exist. This synergy has led to continuous improvement, customer satisfaction, sustainability of the organization in the market, an improved competitive advantage, increased organization wide commitment and greater profitability.

Evans (2000:31-36) states that there is a fairly universal agreement among quality experts that effective organizations will incorporate quality into their strategic planning process as a vital element. He cautions that when quality is neglected, it cannot be built later into the organization. It must be built around quality planning.

Until a few years ago, very few organizations attempted to integrate quality practices with strategic initiatives. Despite the increased global evidence that has been identified in the literature above and the culture of continuous improvement, many organizations have tried implementing this integration. Some organizations have even remained unconvinced of the substantial benefits that are available.

2.6. Disadvantages of Quality Practices in the Strategic Management Process

2.6.1 The Lack of Total Quality Management Initiatives

Chin and Pun (2002:272-294) claim that there is a strong perception that quality practices and strategic planning have a direct relationship with increased organizational performance. However, the latter is difficult to achieve without the development and implementation of a TQM philosophy.

Hasmi (2002:1-4) states that although TQM recommends continuous improvement as a tool for increasing customer satisfaction, many organizations have overlooked including it when developing relevant strategies. It should be recognized that although most

experts in this field recognize and foresee improved organizational performances, empirical studies are yet to prove this.

According to Svensson (2006:22-29) the sustainability of TQM can be debated. Karrupusami and Gandhinathan (2007:7) define sustainability as the ability of an organization to adapt to changes in the business environment to capture contemporary best practices, to achieve and maintain a superior competitive advantage. Recently increasing interest concerning quality management practices has been adopted. However, literature presented from the past five years has shown that TQM initiatives had failed because critical success factors were not in place.

According to Tang and Bauer (1995:21-31) there is some resistance to TQM, because employees perceive TQM as controlling, rather than empowering and a ploy to get them to work harder for fewer rewards. In some instances, it may be seen that TQM is empowering, but not all individuals want empowered jobs.

2.6.2 Criticisms of Six Sigma

General Electric, one of the early adopters of Six Sigma, postulates that Six Sigma is a disciplined methodology of defining, measuring, analyzing, improving and controlling the quality in every one of an organization's products, processes and transactions, with the ultimate goal of virtually eliminating all defects. Six Sigma advocates the need to continue developing this methodology to improve organizational performance (Stamatis, 2000:2).

Despite the evidence above that it does work, Jaideep (1999:4) asseverates that Six Sigma still has its criticisms. There are criticisms about Six Sigma which suggest that the practice is an elitist technique. Through all this, Six Sigma has proven itself to be a

highly effective management tool. Most of the incidences of roadblocks to Six Sigma have come from external sources. In the rare events of its failures, they are ultimately determined to have been caused by improper training of Six Sigma employees and not because of system errors.

It is evident from Stamatis (2000:2) that senior management and subordinates in Caterpillar Machinery are not well informed about the benefits of implementing Six-Sigma. This was due to inadequate training and lack of information provided by senior management.

In spite of its scientific approach towards quality improvement, there are criticisms against Six Sigma. The most one is there is nothing new about Six Sigma as it imitates already existing and proven techniques such as TQM. This indicates that Six Sigma is just a newer version of TQM practices. While Six Sigma was originally created as a continuous quality improvement technique, nowadays it is drastically different from the TQM approach of the 1980s.

The table below shows some of the key differences between Six Sigma and TQM:

<i>Six Sigma</i>	<i>Total Quality</i>
Executive ownership	Self-directed work teams
Business-strategy execution system	Quality initiative
Cross-functional	Largely within a single function
Focused training with verifiable	No mass training in statistics and return quality
Business results oriented	Return on investment
Reduced defects	Quality oriented

Table 2.1 – Differences between Six Sigma and TQM (adapted from Jaideep, 1999:4)

The second criticism is that it has little to offer that cannot be found elsewhere. It is true, that Six Sigma programs have incorporated tools that have been useful in previous

quality initiatives. Although the quality movement has attempted to move from defect measures to a variable measure of product and process performance, the older methods do not necessarily represent a primitive way of thinking about quality. After all, defect and defective counts provide tangible, measurable results that can be a useful reflection of performance (Hahn, Doganaksoy and Hoerl, 2002:5).

According to Stamatis (2000:2) another criticism is that although Six Sigma does focus adequately on a preventive and a proactive approach to problems, it is more of an appraisal and corrective action system. There is much more to Six Sigma than appraisal, it includes the education and training of the entire workforce and the creation of an infrastructure of experts who focus on projects to improve quality, timeliness and cost. Furthermore, this criticism unfairly assumes that appraisal programmes are not useful. Appraisal can be a great starting point as it makes the consequences of current practices clear. Appraisals also provide a foundation for identifying and tracking improvements, which is critical to the well-being of any programme.

2.6.3 Poor Implementation of Strategic Quality Management

The following case study about the Netscape Corporation indicates the poor implementation of strategic quality management. In the fast-evolving but very demanding field of Internet browsers, any perceived lack of product or service quality can be fatal. Based on recent news reports, Netscape maintains an open relationship with its customers and tries to be responsive to any difficulty that its customers might face in using its product in different settings. This responsiveness to customers and flexibility in interactions, in conjunction with a very high product quality, are all quality concepts which seem to have been incorporated into the strategic planning of Netscape but might

not have been formally and explicitly stated as such (Aravindan, Devadasan and Selladurai, 2001:92). Their empirical research shows that quality practices affected overall organizational performance. There is much debate around the world on what is the best approach to quality improvement. Each practice has its own criticism or disadvantage. Sharma and Gadenne (2001:433-445) report that many organizations' initiatives fail because the aforesaid practices are either not aligned with strategies or because these practices are not properly coordinated with each other.

Therefore, effective quality management cannot be accomplished in isolation from other initiatives or from the overall strategy of the organization. Chin, Tummala and Chan (2002:213-218) are of the view that although a plethora of approaches to quality management have been used, little agreement exists on how to implement them, which programs work and how specific quality initiatives relate to strategic objectives.

Chin and Pun (2002:272-294), Hasmi (2002:1-4), Mehra, Hoffman and Sirias (2001:855-876), Tang and Bauer (1995:21-31), Jaideep (1999:4), Stamatis (2000:2), Hahn, Doganaksoy and Hoerl (2002:5) and Aravindan, Devadasan and Selladurai (2001:92) indicate that there are indeed some downfalls of integrating quality practices in strategic management. One of the major downfalls is that most employees do not want to adapt to new quality practices because this means more work and more training. They foresee changes in the system as a threat to their jobs and this leads to many difficulties in adopting the various quality practices. Another downfall is that management lacks the knowledge of the use of such quality practices and is unable to incorporate them in the strategic planning process.

2.7. Conceptual Frame Work

A total of five quality tools and within these tools different quality dimensions in organization have been conceptualized from the literature. Different dimensions/tools of quality are listed in the above literature by different scholars, but the researcher summarizes the quality practices in to 12 dimensions such as: supplier quality, product design, management commitment, customer satisfaction, continuous improvement, teamwork, employee’s empowerment, training, feedback, and effective communication measurement and evaluation, process control and improvement, and quality system improvement. The framework articulates that these quality dimensions will integrate in the strategic organization management process.

Quality dimensions are independent variables, and strategic planning is dependent variable. Each independent variable (dimension of quality) and dependent variable (strategic planning) will be measured by a number of items.

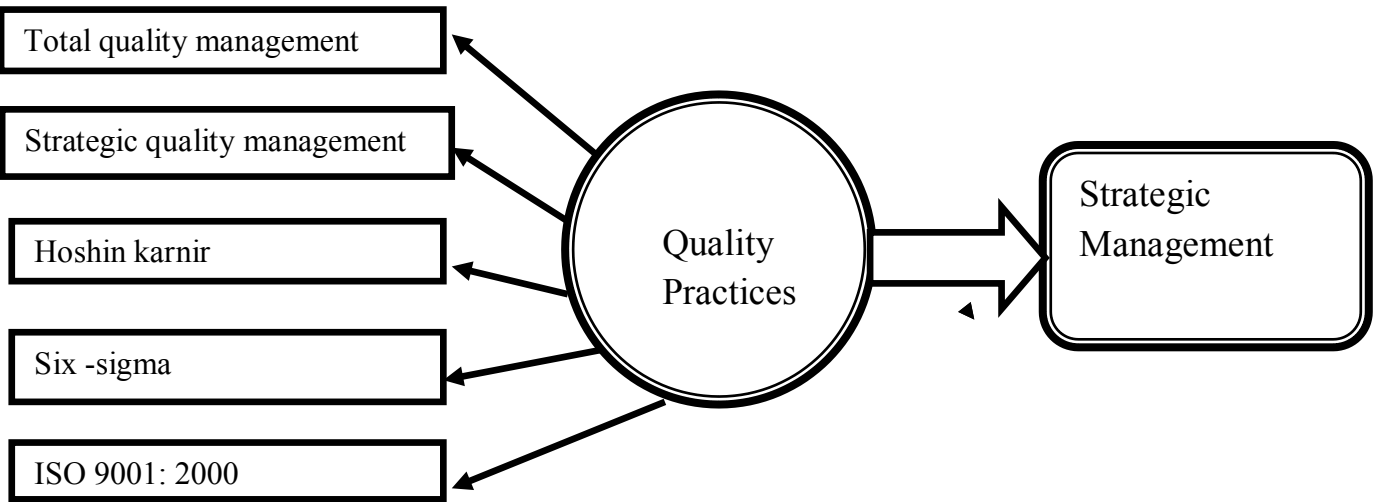


Figure 3. The proposed Framework for the integration of quality practices in strategic management (source: adopted from literature review)

CHAPTER THREE

3. RESEARCH METHODOLOGY

3.1. Introduction

This study is intended to carry out at Ayka Addis Textile and Investment Group. The study was designed as the cross - sectional survey for the quantitative study which is used to gather the relevant and pertinent information with regard to incorporating quality practices in to strategic management process. Thus, this study is classified as a survey research.

3.2. Research Design

The purpose of this study is to evaluate the usefulness of integrating quality practices in strategic management process. The study is said to be co relational in design because there is the intent to establish the relationship between dependent and independent variable of the study. According to (Reid, 1987) Co relational research aims to ascertain if there is a significant association between two variables. The nature of this research is to identify if there is a relation between the predictor variable and the response variable. The predictor variable is quality practices, and the response variable is strategic management. Creswell (2007) asserted, “By explaining a relationship among variables, you are interested in determining whether one or more variables might influence another variable”.

3.3. Research Approach

Mixed research methods are used in this study. To achieve a forementioned objectives, the study adopts mixed research approach, where it can be use of questionnaire provided predominantly descriptive and qualified data. Quantitative research consisted of the administration of

questionnaires. The purpose of administering questionnaires pertaining to the study is to establish whether quality practices are integrated with strategic management processes in an organization. A questionnaire is used to determine if organizations adhered to quality practices and strategic practices as independent tools or whether they in fact integrated them.

3.4. Population, Sample frame and Sampling Technique

For the purpose of this study, the target population identified was the employees and management of Ayka Addis Textile and Investment Group. The preliminary survey undertaken by the researcher indicates that there were 7,500 total staff members in the current year.

The sampling frame for this research study was the senior management and employees of the targeted division within the organization especially production or operation and quality inspection area, where the employees in the other areas are also relevant. This sampling frame was chosen for the present research study because the researcher believes that an exact evaluation of the integrating quality practices in strategic planning can be extracted from employees who are in higher position and have relevant work experience basically.

The sampling frame would consist of all middle to top level management executives of Ayka Addis Textile and Investment Group. In addition the population which was participated is professional management executives who have certain work experience in their own position in this industry.

To carry out this study, the researcher purposely selected the employees and management of Ayka Addis Textile and Investment Group since purposely selected site or participant will best help the researcher to understand the problem and the research question (Creswell, 2007). Moreover, judgmental sampling is used because it gives the chance for the researcher to select

respondents especially in production, quality inspection and management area that will serve the objective of the research.

3.5. Unit of Analysis and Time Dimension

One of the most important ideas in a research study is the unit of analysis. The unit of analysis is the major entity that you are analyzing in a study. For the purpose of this study, the unit of analysis was individuals.

Fife-schaw (2002) describes cross-sectional research as the comparison between subgroups and the discovery of relationship between variables. a cross-sectional research study was performed with data only once over a period of a few days in order to complete the questionnaire.

3.6. Method of Data Analysis

Once responses are revealed from respondents and document reviewed; tables, graph and other statistical analysis were employed to analyze. The Data were analyzed using SPSS. Descriptive statistics and inferential statistics were utilized. The statistical tools were aligned with the objectives of the research. Descriptive statistics were used to provide the frequency, measurement of central tendency and percentage and inferential statistics were used to ascertain the relationship between the variables. In addition, a total of 12 dimensions which is incorporated into five of quality practices in strategic planning are conceptualized and measured using regression analysis inferential type that it was handled the nature of this research. Both validity and reliability tests were conducted. And finally based on the research result conclusion was drawn and finally recommendation were forwarded.

3.7. Data Source and Data Collection Instrument

In this study, the researcher used both primary and secondary data in relation to the topic under discussion. There are two main procedures to collect relevant data, primary and secondary data. Secondary data, which are collected by others where the purpose of the data might be, distinguish from the research work. On the other hand, primary data which writers of the thesis collect directly to investigate the specific problem (Ghauri and Kjell, 2005). The study was depending on primary data collected from the employees/management.

3.8. Data Collection

Executives, managers and senior staffs are selected for the questionnaire survey from each department of the Ayka Addis Textile and Investment Group, because the researcher believes that they had sufficient knowledge and experience with quality management practices and strategic management.

Questionnaire method were used to gather primary data from the employees' of the Ayka Addis Textile and Investment Group, which was distributed by the researcher to the respondents. The questionnaires have two main sections. The first section includes questions about demographic profiles of the respondents i.e. sex, department, educational level and work experience. The second section includes questions that deal about the importance of integrating quality practices into strategic management. The five-point Likert scales is used for representing a range of attitudes from 1 – strongly disagree to 5 – strongly agree to assess the importance of integrating quality practices into strategic management. Finally what I want to add is the data collected is not made simply by distribution of questionnaire only rather the researcher devoted his time and other resources by reading and clarifying the questions to them followed by reading

respondents' feedback through taking notes and at the collecting the questionnaire from the respondents.

3.9. Model Specification

Model specification can be defined as the exercise of formally stating a model i.e. the explicit translation of theory into mathematical equations and involves using all the available relevant theory research and information and developing a theoretical model. The regressed variables which have more than two outcomes in the form of likert scale questions are importantly regressed through multiple regression analysis (Andy Field 2006). As the result, multiple regressions are preferred in this study. Therefore, the following models are developed for the purpose of running regression analysis that is necessary to test usefulness of integrating quality practices in strategic management process.

According to Andy Field (2006), the formula to compute multiple regressions is the following:

$$Y_i = (b_0 + b_1X_{i1} + b_2X_{i2} + b_3X_{i3} + b_4X_{i4} + b_5X_{i5}) + \epsilon_i$$

Where; Y_i is strategic management

$b_0, b_1 \dots b_5$ is regression coefficients of quality practices

$X_{i1}, X_{i2} \dots X_{i5}$ is dimensions of quality practices that affects the strategic management process.

ϵ_i is residual term or the difference between the predicted value and actual value in strategic management

3.10. Validity and Reliability Test

Construct validity- in this study the researcher tried to address the construct validity through the review of literature and adapting instruments used in previous research. Furthermore, the research addresses through defining clearly the construct of interest and develop valid measures that operationalise defined constructs as well as pilot study.

Statistical conclusion validity: in quantitative and qualitative type of study it is worth to consider the issue of statistical conclusion validity. This type of validity is addressed through selection of the correct statistical method used for hypothesis testing. Hence, the appropriate statistical testing is both Pearson correlation for interval scale variable and regression analysis for interval scale variable is selected by researcher so that the conclusion derived using this statistical procedure is valid.

Internal validity: is how the findings of the research match to the reality and as the researcher measure the things that are aimed to measure. Furthermore, the reality in quantitative research is an ongoing process. This specific study is cross-sectional field survey and poor in internal validity because of the inability to manipulate the independent variable. The other measure of internal validity is whether the finding is non-spurious or not. Therefore, the finding in this specific study is strongly supported by the reality in the context and the general theory in the field, even though factors such as context and methodology employed have shaped the result.

External validity: it revealed whether the observed associations can be generalized from the sample to the population, or to other people, organizations, contexts, or time. The more representative, the more confident we can be in generalizing from the sample to the population.

This study addresses external validity through taking representative samples and can be generalized to the selected textile industry group over the country and give a little insight to other textile industry group in Ethiopia. Moreover, since the unit of analysis is individuals in the selected textile group, population validity is realized.

Reliability analysis is concerned with the internal consistency of the items comprising each measure was examined using Cronbach's alpha (Cronbach, 1951). Bryman and Bell (2003) ascertains that reliability differs from validity in that it relates insisted to how it is measured. Hair et al. (2007) defined reliability as the extents to which a variable or a set of variable is consistent in what it is extended to measure. As the current study uses multiple items in all constructs, internal consistency analysis were carried out through Cronbach alpha. The cronbach's alpha is obtained by the variance of individual components and by the variance of components sum of each evaluated, aiming to investigate the possible relations between the items.

In this case, the variance used at cronbach's coefficients calculus is: the number of question of the instrument (K), the variance of each question (Si^2), and the total variance of instrument (St^2). The cronbach's alpha coefficients can be calculated through the following equation.

$$\alpha = \left(\frac{k}{k-1} \right) * \left(1 - \frac{\sum_{i=1}^k Si^2}{St^2} \right)$$

Source: Cronbach Lee, (1951).

Following evidence established by Nunnally (1987), an alpha score of higher than 0.7 is generally considered to be acceptable, while an alpha score of higher than 0.8 is considered to be a good measure of reliability. In this study, all the independent (quality practices) and dependent

variables (strategic management) have the alpha value is greater than 0.7, that indicates a good measure of reliability. In the following table, the independent variables (quality practices) and dependent variable (strategic management) will be tested through Cronbach alpha to check the reliability of the study.

Table 3.1 alpha coefficient for independent and dependent variables, and the combined variables

S/n	Variables of the study	No of items	Cronbach alpha value
1	Total quality management	8	.745
2	Six sigma	10	.801
3	Hoshin planning	6	.780
4	Strategic quality management	6	.784
5	ISO 9001:2000	6	.760
6	Strategic management	7	.726
7	Over all combined variables	43	.957

3.11. Preliminary Studies or Pilot Test

In this study prior to distribution of the actual survey, a pilot test was carried out to eliminate any possible difficulties or confusion with the questionnaire. The main objective is to detect weakness in questionnaire design and measurement scale. Many aspects of questionnaire have been tested, including question content, wording, sequences, form, layout and instruction. Due to difficult wording and other non consistency problems, research advisor returned valuable feedbacks and comments. After collecting the feedback, editing was done to correct the ambiguous wording,

leading questions and unclear format before mass distribution of the questionnaire. Generally in this study preliminary test was conducted by involving some employees and other participants were to validate the content of the questionnaire in terms of relevance, accuracy, and wording.

3.12. Ethical Considerations

Before writing the thesis, the researcher considered the ethical issues that can be anticipated and described in the study. These issues relate to all phases of the research process. The problem identified by the researcher benefits individuals being studied and that will be meaningful for others. The researcher was not further marginalize or disempowered the study participants; and restricts claims about groups to which the results can't be generalized. The purpose of the study was described to the participants and it was provided letter of approval in order to establish trust and credibility.

The researcher was not put participants at risk, respect vulnerable populations, and participants will remain confidential, if the need arise. The data, once analyzed, the researcher will keep for a reasonable period of time and then discards so that it will not fall into the hands of other researchers who might misappropriate it. The researcher was not also used language or words that are biased against persons because of gender, sexual orientation, racial or ethnic group, disability, or age. Suppressing, falsifying, and inventing findings to meet a researcher's and/or participants' need were eliminated.

3.13. Limitations of the Study

Though the study presents a comprehensive theme over the preceding and succeeding chapters, it is not free from limitations. As a result, this study was conducted with some sort of limitations. The researcher would face with many problems which, in fact, may affect the quality of the study. There was a confront in conducting a study due to a limited time frame and the limited access information; when the researcher inquires respondents they were hesitating of the purpose of the study and show the sort of reluctant to offer the correct information.

To the managements, supervisors and directors of Ayka Addis Textile and Investment Group as they usually busy, and some of these bodies were not willing to provide information that they think is confidential and little of them were not properly known about some of a new philosophy of quality. It was also difficult to gather sufficient data for the study due to the limited number of related prior research works regarding the integration of quality practices in to strategic management in Ethiopian context.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRETATION

4.1. Introduction

As indicated in the preceding chapters, this research study attempted to evaluate the importance of integration of quality practices in to strategic management process in Ayka Addis Textile and Investment group. A total of 120 questionnaires were distributed to the employees and management and then 111 (92.5%) filled questionnaire were obtained valid and used for analysis. The data collected were presented, analyzed interpreted using SPSS 21 software version. Given that all of the independent and dependent variables of the study have been measured in interval scale, and given that the aim of investigation and testing is the relationship between the independent and dependent variables of the study; therefore, the most appropriate statistical testing for testing the hypothesis of the study is Pearson correlation testing and regression analysis.

This chapter begins with the general descriptive statistics of the respondent's background. It consists of the response rate, distribution entities, and percentage of respondents. Secondly it will highlight the practices of quality and strategic management process in this industry. A closer look at the overall mean of the quality practices (independent variables) and the strategic management (dependent variable). By analyzing the results, it is expected to give a rough idea on the area lacking in implementation and the potential weakness among Ayka Addis Textile and Investment Group that needed to be acted upon.

Lastly, this chapter is intended to endeavor the usefulness of integrating quality practices in to strategic management in Ayka Addis Textile and Investment group.

4.2. Descriptive Statistics

4.2.1. Descriptive Measure of Demographic back ground of the Respondents

The demographic profile of the respondents was presented in this section. The personal profile of the respondent is analyzed as per their gender, department, level of education achievements and work experience in the organization.

Table- 4.1. Back ground profile of the respondents

s/n	Back ground	Distribution	Sample	Frequency
1	Gender	Male	69	62.2%
		Female	42	37.8%
		Total	111	100%
2	Department	Operation/production department	36	32.4%
		Quality and inspection department	30	27.0%
		Marketing/sales department	24	21.6%
		Human Resource department	11	9.9%
		Others	10	9.0%
		Total	111	100%
3	Level of education	Technical school graduate	21	18.9%
		College diploma holder	31	27.9%
		BA/BSc holder	37	33.3%
		MA/MSc holder	20	18%
		PhD holder	2	1.8%
		Others	---	---%
		Total	111	100%
4	Work experience	0- 2 years	22	19.8%
		3 - 5 years	45	40.5%
		6 – 10 years	32	28.8%
		More than 10 years	12	10.8%
		Total	111	100%

Source: Research Questionnaire

As can be seen in the background profile of respondents table 4.1, all the background of employees/management is varying in gender, departments, level of education and year of service in the present industry.

Accordingly, item-1 of the table indicates out of 111 respondents, 62.2% is male and the remaining 37.8% is female. Therefore, based on the information, we can infer that majority of the employees are male in currently working in Ayka Addis Textile and Investment Group. Item-2 of the table describes the department of respondents that they are working in. Consequently, the largest rate of respondents are operation/production and quality/ inspection departments which may rates 32.4% and 27% respectively, 21.6% and 9.9% are marketing and human resource management department respectively and the rest 9% are other than the above departments. So, the largest rate of respondents are from operation/production and quality/inspection departments and significant for the reliability of data since the research idea is highlighting the integration of quality practices in to strategic management process.

Item-3 of the table specifies the educational level of respondents. As a result, the greatest numbers of respondents are first degree and diploma holders consists of 33.3% and 27.9% respectively, followed by technical school graduate (18.9%) and master degree holder (18%), the remaining 1.8% are PhD holders and there are no respondents who are qualified with other profession.

The last item in the above table also points towards the year of service in related industry. It indicates that 19.8% of respondents have been working for 0 to 2 years, 40.5%, 28.8% and 10.8% of respondents have been working for 3-5 years, 6-10 years and more than 10 years respectively. Based on this results, we can infer that majority of the respondents have working for more than 3 years and significant for the soundness of data that provided by the respondents, since those who

are more stayed in the industry identify more about and assumed to be they can offer precise information to the researcher.

4.2.2. Descriptive Measure of Quality Practices

The attitude of the employees or management and others of the organization about the use of quality practices in to strategic management. Therefore, the following table blow gives the breakdown of the descriptive measure of five quality dimensions that were tested by the questionnaire.

Table 4.2 Descriptive measure of quality practices

Dimensions	Items	Sample (N)	Minimum	Maximum	Mean	Standard deviation
Total Quality Management (TQM)	TQM1	111	3.00	5.00	4.2703	.52129
	TQM2	111	2.00	5.00	3.9369	.67796
	TQM3	111	3.00	5.00	3.7387	.61366
	TQM4	111	3.00	5.00	3.6036	.63646
	TQM5	111	2.00	5.00	3.7387	.86036
	TQM6	111	2.00	5.00	3.3874	.86520
	TQM7	111	2.00	5.00	3.4595	.83974
	TQM8	111	2.00	5.00	3.8919	.70519
Six sigma (6σ)	6σ 1	111	3.00	5.00	3.7658	.68696
	6σ 2	111	2.00	5.00	3.8378	.73287
	6σ 3	111	2.00	5.00	3.4865	.79618
	6σ 4	111	2.00	5.00	3.4865	.82973
	6σ 5	111	1.00	5.00	3.3874	.81096
	6σ 6	111	2.00	5.00	3.6667	.69194
	6σ 7	111	2.00	5.00	3.7477	.84712
	6σ 8	111	1.00	5.00	3.3153	.93402

	6σ 9	111	2.00	5.00	3.5766	.75738
	6σ 10	111	3.00	5.00	3.9189	.66244
Hoshin planning (HP)	HP1	111	1.00	5.00	2.9640	.90381
	HP2	111	1.00	5.00	3.7117	.89836
	HP3	111	1.00	5.00	3.2342	1.00864
	HP4	111	1.00	5.00	3.2342	1.06135
	HP5	111	1.00	5.00	3.2703	.92388
	HP6	111	2.00	5.00	3.6486	.70902
Strategic Quality Management (SQM)	SQM1	111	3.00	5.00	3.9189	.66244
	SQM2	111	2.00	5.00	3.3874	.86520
	SQM3	111	2.00	5.00	3.4595	.83974
	SQM4	111	1.00	5.00	3.7117	.89836
	SQM5	111	1.00	5.00	3.2973	.93997
	SQM6	111	3.00	5.00	3.6484	.62738
ISO 9001:2000	ISO1	111	2.00	5.00	3.8919	.70519
	ISO2	111	1.00	5.00	3.0180	.87368
	ISO3	111	1.00	5.00	3.7117	.89836
	ISO4	111	1.00	5.00	3.2342	1.00864
	ISO5	111	1.00	5.00	3.2342	1.06135
	ISO6	111	1.00	5.00	3.2973	.93025
	Valid N (list wise)	111				

Source: Research questionnaire

The analysis in table 4.2 above indicates that the lowest mean is approximately 2.96 on HP1 and all the means lie between 2.9 and 4.3. The finding indicates that the highest mean is on TQM1 at approximately 4.27 and S.D (.52). On average therefore the respondent's opinions were above average regarding the practices offering by Ayka Addis Textile and Investment Group on the different elements of quality dimensions. However, none of the means for the 32 questions of the

quality practices lie below the average. Therefore, based on these findings, the researcher can infer that all the quality practices are being used in this industry to indicate their level of performance, for generating competitive advantage, to increase customer satisfaction and to assess process control and continuous improvement.

4.2.3. Describing the Composite Quality Practices Score

The various perceptions under each quality practices were grouped into five constructs and calculated individual average to get composite score. Table below shows the result of quality practices composite score. The composite score calculated are given in table 4.3 below.

Table 4.3 the descriptive statistics of the quality practices composite scores.

Quality practices	N	Minimum	Maximum	Mean	Std. Deviation
SQM	111	2.50	5.00	3.5706	.56477
ISO	111	1.67	5.00	3.3979	.62043
HP	111	1.33	5.00	3.3438	.63774
TQM	111	2.88	5.00	3.7534	.43415
6 σ	111	2.70	5.00	3.6189	.46642
Valid N (listwise)	111				

Source: Research questionnaire

As can be seen on the composite score of quality practices in table 4.3 above; total quality management (TQM) has the highest mean score of 3.75 with S.D (.56) followed by six sigma (6 σ), strategic quality management (SQM) and ISO 9001:2000 with a mean score of 3.62, 3.57 and 3.398 respectively. The least important perception of employees according to the finding is hoshin planning with a score of approximately 3.34 with S.D (.64). These findings indicate that the composite mean scores are all less than 4 for each quality practices and yet the maximum possible score is 5. The finding indicates further that this industry implement strategic quality

management to play key role in determining the usefulness of the integration of these quality practices in strategic management process whereas hoshin planning plays smaller role as depicted by the mean score of 3.34 with S.D (.64). This does not mean that hoshin kenir is not important as quality practices. It is however ranked as least important of quality practices with a mean score above the average score of 2.5 from the five- point likert scale type.

Generally, the table below indicates that overall mean score of the independent variables that scores 3.57 with S.D (.54). Therefore, we can infer again that the employees' perception regarding to all quality practices are approaches to agree to each quality practices and this may shows there is an implementation of all these quality practices in their own performance of all work activities to gain competitive advantages.

Table 4.4 the overall average and standard deviation of quality practices.

Independent variables	Average	Standard deviation
Quality practices	3.57	.5447

4.2.4 Descriptive Measure of the Integration of Quality Practices in to Strategic Management Process and its Usefulness

In this section different perceptions of employees and management are described with regards to the incorporation of quality practices in to strategic management and describing its importance in the particular industry. Therefore, in the following tables all of the items are presented to compute the respondent's perception based on the five-point likert scale. The items that shows the integration of quality practices in to strategic management is computed the averages of

respondent's perception and the items that describes the usefulness of integrating quality practices in to strategic management is calculated (the percentage value of respondent's perception.)

Table 4.5- the integration of quality practices in to strategic planning process

s/n	Items	Sample	Minimum	Maximum	Mean	Standard deviation
1	My organization integrate TQM in its strategic planning process	111	2	5	4.2793	.81096
2	My organization integrate six sigma in its strategic planning process	111	2	5	4.0811	.66244
3	My organization integrate hoshin kanri in its strategic planning process	111	2	5	4.1802	.70322
4	My organization integrate strategic quality management in its strategic planning process	111	2	5	4.2883	.76737
5	My organization integrate ISO 9001:2000 in its strategic planning process	111	2	5	4.0901	.76929

As can be seen the integration of quality practices in to strategic management in Ayka Addis Textile and Investment Group, the integration of strategic quality management in strategic planning process has the highest mean score of 4.3 with S.D (.76) followed by the integrating of total quality management with a mean score of approximately 4.28 with S.D (.81), whereas the integration of six sigma, hoshin kanri and ISO 9001:2000 in strategic management have a mean score of 4.08, 4.18 and 4.09 respectively. Therefore in view of this results we can infer that, this industry has been most importantly incorporate the two quality practices (strategic quality management and total quality management) in to strategic management process, whereas the

rest three quality practices (six sigma, ISO 9001:2000 and hoshin planning) are less importantly integrate in strategic planning process in Ayka Addis Textile and Investment Group. Thus, even if the industry integrate these quality practices in to strategic management process according to its order of importance, DeFoe and Janssen (2001:4-6) supports integrating quality practices into the strategic management process becomes part of a foundation that is essential in supporting the management of quality in an organization.

Table- 4.6. The importance of implementing a combination of quality practices in strategic management process.

Implementing a combination of quality practices in the strategic planning process is useful in my organization					
		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly disagree	-	-	-	-
Valid	Disagree	2	1.8	1.8	1.8
	Neutral	30	27.0	27.0	28.8
	Agree	40	36.0	36.0	64.9
	strongly agree	39	35.1	35.1	100.0
	Total	111	100.0	100.0	

Table 4.6 shows that 35.1% of respondents replied strongly agree and supports implementing all the identified quality practices in the strategic planning process is useful to the organization, 36%, 27% and 1.8% replied agree, neutral and disagree with the implementation of a combination of quality practices in the strategic management is important to the selected industry respectively and no respondent is strongly disagree with this statement. Based on these results, majority of respondents shows their feeling on the application of integrating quality practices in strategic management is useful to the industry. Therefore, according to Brown (2005) we can implies that,

implementing a combination of quality practices in the strategic management is useful to solve problems and improve the quality of products within the organization, and it should receive organization-wide commitment. In addition, Lakhal, Pasin and Limam (2006:625-646) explains that the integration of quality management practices and strategic management provides a synergistic combination that is far more powerful than either of them being operated separately.

Table- 4.7. Gaining achievement when quality practices integrating in to strategic management

My organization gained achievement after the integration of quality practices in to strategic management process					
		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly disagree	-	-	-	-
Valid	Disagree	1	.9	.9	.9
	Neutral	20	18.0	18.0	18.9
	Agree	69	62.2	62.2	81.1
	strongly agree	21	18.9	18.9	100.0
	Total	111	100.0	100.0	

As one can see in the above table 4.7, it shows a agreement or disagreement towards gaining achievements when the industry integrates quality practices in strategic management process. 62.2% of respondents are agree with that the industry gaining achievements after the integration of quality practices into strategic management, 18.9% are strongly agree, followed by 18% of respondents replied neutral, and the rest 0.9% are disagree and there is no respondents come up with the response of strongly disagree. Thus, the largest number of respondents is agreed and they believe that their industry obtained achievements after the quality practices are incorporated in the

strategic management process. This may infer that, if a given organization is strongly integrated in the strategic management process, it should gain efficient achievement on their work activities.

Table 4.8. Quality plan is an integral part of the overall strategic plan

Quality plan have become an integral part of the overall strategic plan in my organization					
		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly disagree	-	-	-	-
Valid	Disagree	2	1.8	1.8	1.8
	Neutral	22	19.8	19.8	21.6
	Agree	53	47.7	47.7	69.4
	strongly agree	34	30.6	30.6	100.0
	Total	111	100.0	100.0	

The above table depicts that quality plan have become an integral part of the overall strategic plan; 47.7% of respondents choose “agree”, 30.6% of the respondents replied strongly agree, followed by 19.8% and 1.8% replied neutral and disagree with the quality plan have become an integral part of the overall strategic plan in their current working industry respectively, and no one replied strongly disagree with this statement. Majority of respondents believes that quality plan have become an integral part of overall strategic plan in the industry, so this may shows the industry documents and use quality plan for the purpose of translating quality policy in to measurable objectives and requirements in overall strategic planning process.

Table 4.9. Quality initiatives gained increased importance in strategic management

Quality initiative have gained increased importance in strategic management in my organization					
		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly disagree	-	-	-	-
Valid	Disagree	4	3.6	3.6	3.6
	Neutral	25	22.5	22.5	26.1
	Agree	46	41.4	41.4	67.6
	strongly agree	36	32.4	32.4	100.0
	Total	111	100.0	100.0	

As observed from the above table 4.9, 32.4% of respondents replied strongly agree and fully supports that quality initiatives have gained increased importance in strategic management, 41.4% of respondents chose agree, the rest 22.5% and 3.6% of respondents replied neutral and disagree with quality initiatives have obtained a greater value in strategic management respectively. This finding indicates that, majority of the respondents believes that quality initiative has gained increased significance in strategic management in their particular industry.

Table -4.10. Quality management involves strong leadership and strategic planning.

Quality management in my organization involves strong leadership and strategic planning					
		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly disagree	-	-	-	-
Valid	Disagree	3	2.7	2.7	2.7
	Neutral	14	12.6	12.6	15.3
	Agree	51	45.9	45.9	61.3
	strongly agree	43	38.7	38.7	100.0
	Total	111	100.0	100.0	

As can be seen in the above table 4.10, it shows the agreement or disagreement towards quality management in the industry involves strong leadership and strategic planning; 45.9% of respondents are agree with that the quality management in the industry involves strong leadership and strategic planning, 38.7% are strongly agree, followed by 12.6% of respondents replied neutral, and the remaining 2.7% are disagree and there is no respondents come up with the response of strongly disagree. Thus, the largest numbers of respondents are most probably agreed and they believe that quality management in the industry involves strong leadership and strategic planning. This may infer that, according to Parast and Digman (2007: 802-818) quality management involves strong leadership and strategic planning that is recognized as a

comprehensive management paradigm for enhancing organizational performance and competitiveness.

Table 4.11. the principles of quality practices improve the strategic planning process and then lead to better strategies.

The principles of quality practices can improve an organization's strategic planning process and therefore leads to better strategies in my organization					
		Frequency	Percent	Valid Percent	Cumulative Percent
	Strongly disagree	-	-	-	-
	Disagree	-	-	-	-
Valid	Neutral	16	14.4	14.4	14.4
	Agree	62	55.9	55.9	70.3
	Strongly agree	33	29.7	29.7	100.0
	Total	111	100.0	100.0	

The results from table 4.11 illustrates that there is high degree of agreement (55.9%) with that the integration would lead to better strategies and improvement in the strategic planning processes, which will in turn lead to high quality in every operation and department in the organization and the rest 29.7% and 14.4% are strongly agree and neutral with this statement respectively, and there is no negative perception of employees/management towards the principles of quality practices can improve strategic planning process and it leads to better strategies in their working environment.

However, some of senior management has acknowledged the following importance of the principles of quality practices and supports the integration of quality practices in strategic management:

- The integration can lead to better strategic planning and continuous improvement

- The industry can achieve greater customer satisfaction and improved profitability
- The correct implementation of this integration could increase productivity and improve operations
- It can improve communication from senior management and other levels in the industry
- The industry can supply products and services of superior quality that is consistent with customer needs
- The principles of quality practices can enhance relationships with customers
- The integration has allowed industry to compete in global markets and become world class manufacturers
- Has increased market share, reducing operational costs, reducing defects and scrap
- It would enhance the progression of the industry

Several authors such as Oakland (2003:56), Svensson (2006:22-29), Leonard and McAdam (2004:254-266), Mehra, Hoffman and Sirias (2001:855-876), Zairi (2006:149-149), Allen and Kilmann (2001:110-131), Terziovski and Samson (1999-393:409), Aravindan, Devadasan and Selladurai (2001-80-94), Friday-Stroud and Sutterfield (2007:562) DeFoe and Janssen (2001:4-6), Sharma and Gadenne (2001:433-445) and Chin, Tummala and Tang (2002:213-218) suggests that global trends of markets and increased competition have led to focusing on the satisfaction of customers' needs as a means of obtaining a competitive advantage and ensuring the survival of an organization. One of the major strategic changes that have occurred in recent years in many organizations is their striving to satisfy customers' needs with the emphasis on quality and the adoption of quality practices in strategic management.

4.3. Inferential Statistics

In this section the results of inferential statistical techniques used in the study are presented. In order to test the hypothesis, the Pearson correlation coefficient was calculated as well as regression analysis is used. Based on the result obtained from the research, conclusions are drawn with respect to each hypothesis generated for the research undertaken in textile industry.

4.3.1. Correlation

Correlations are the measure of the linear relationship between two variables. A Pearson's correlation coefficient is appropriate method to measure the correlation when the data are measured at interval level (Andy, 2006). A correlation coefficient has a value ranging from -1 to 1. Values that are closer to the absolute value of 1 indicate that there is a strong relationship between the variables being correlated whereas values closer to 0 indicates that there is little or no linear relationship (Fikre et al., 2009). As described by Andy (2006), the correlation is a commonly used measure of the size of an effect: values of ± 0.1 represent a small effect, ± 0.3 is a medium effect and ± 0.5 is a large effect.

4.3.1.1. Correlation between Merged Quality Practice and Strategic Management

Pearson correlation matrix was conducted to understand the degree of relationship between the combined quality practices and strategic management in Ayka Addis Textile and Investment Group. The correlation analysis is undertaken here assists to check the main hypothesis of the study.

Table12. Correlation matrix between combined quality practice and strategic management

	Coefficient (r)	p- value
Quality practice	.88**	.000

** . Correlation is significant at the 0.01 level (2-tailed).

As depicted in the above table12, there is a positive relationship between the combined quality practice and strategic management. The correlation was ($r=.88$, $p=.000$) at 0.01 significance level, that indicates the correlation between the variables were greater effect and the results supports the hypothesis that states there is strong relationship between quality practices and strategic management.

4.3.1.2. Correlation between Each Quality Practices and Strategic Management

In the following table Pearson correlation matrix is used to measure whether there is strong significant relationship or not between each of five quality practices and strategic management.

Table13. Correlation between five quality practices and strategic management

S/n	Quality practices	Coefficient (r)	P value
1	Total quality management	.96**	.000
2	Six sigma	.87**	.000
3	Hoshin planning	.70**	.000
4	Strategic quality management	.90**	.000
5	ISO 2001:9000	.75**	.000

** . Correlation is significant at the 0.01 level (2-tailed).

As it is clearly indicated on the table13, there is positive significant relationship between total quality management and strategic management. The result of correlation analysis depicts that total quality management and strategic management has highly significant relationship with coefficient value of (.96), $P=.000$ at 0.01 level of significant.

As observed from the correlation matrix of six sigma and strategic management ($r=.87$, $P=.000$) illustrates there is significant relationship between six sigma and strategic management at 0.01 level of significant. Therefore, the outcome does support the hypothesis states there is strong relationship between six sigma and strategic management in Ayka Addis Textile and Investment group.

As shown in the table-13, the correlation analysis for hoshin planning and strategic management has a coefficient value .70 with p value $0.000 < 0.05$ at 0.01 level of significant. Thus, this result supports the hypothesis that states there is strong significant relationship between hoshin planning and strategic management in the particular industry.

The above table indicates that there was positive significant relationship between strategic quality management and strategic management. The correlation was ($r= 0.90$, $p=0.000$) at 0.01 level of significant which shows the correlation between the variables were large effect and this results encourages the hypothesis that states there is significant relationship between strategic quality management and strategic planning in Ayka Addis textile and Investment Group.

Finally the correlation result also indicates that, there was positive relationship between ISO 9001:2000 and strategic management process, and the coefficient ($r= 0.75$) with p-value of < 0.05 at the 2-tailed alpha value of 0.01. Therefore, the computed results supports the stated hypothesis towards there is significant integration between ISO 9001: 2000 and strategic management in the industry.

In general according to the above table 12 and 13, the combined quality practices and each dimension of quality practices are integrated into strategic management process and the entire stated hypothesis are encouraged, because all p-values regarding the correlation between quality practices and strategic management is less than 0.05 at 0.01 level of significant.

4.3.2. Multi-co linearity Test

To check whether there is harsh multicollinearity in the model, SPSS produces various collinearity diagnostics, one of which is the variance inflation factor (VIF). The VIF indicates whether a predictor has a strong linear relationship with the other predictor(s). Although there are no hard and fast rules about what value of the VIF should cause concern, Myers (1990) suggests that a VIF value of 10 is a good value at which to worry. What's more, if the average VIF is greater than 1, then multicollinearity may be biasing the regression model (Bowerman & O'Connell, 1990). Related to the VIF is the tolerance statistic, which is its reciprocal ($1/VIF$). As such, values below 0.1 indicate serious problems although Menard (1995) suggests that values below 0.2 are worthy of concern. As a result, in this study all the variables of the variance inflation factor is less than 10 and its tolerance statistics value is more than 0.2. Therefore, the results implies that the test does not detect the existence of severe multicollinearity of variables in the model.

Table14- Multi-co linearity results toward quality practices

Coefficients a										
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Co linearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	2.418	.432		5.593	.000	1.561	3.275		
	TQM	-.179	.072	-.419	-2.497	.014	-.321	-.037	.223	4.483
	SS	-0.099	.132	-.145	-.746	.457	-.361	.163	.167	6.001
	HP	.114	.066	.186	1.717	.089	-.018	.246	.531	1.882
	SQ,M	.486	.106	.430	4.592	.000	.276	.696	.716	1.396
	ISO	.143	.057	.290	2.505	.014	.030	.255	.466	2.145

4.3.3. Regression Analysis

In this section regression analysis is conducted to identify by how much the independent variable explains the dependent variable. It is also used to understand by how much each independent variable explains the dependent variable that is strategic management. The results of the regression analysis are provided in the following model summary tables that may depicts the R square (R^2) and adjust R square that indicate the variability of independent variables explains the dependent variable.

Table-15. Model summary of regression analysis between the five dimension of quality practice and strategic management.

Model	Dimensions	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	1	.963 ^a	.927	.927	.12121
	2	.872 ^a	.761	.759	.21991
	3	.701 ^a	.491	.487	.32090
	4	.900 ^a	.809	.808	.19646
	5	.753 ^a	.567	.563	.29604

a. Predictors: (Constant), TQM, SS, HP, SQM and ISO

b. Dependent Variable: SM

According to the regression analysis of model summary table, the results shows the overall quality practice dimensions are probably explain the strategic management. In this case, R square or Adjust R square are taken into consideration to know by how much percent the independent variables (quality practices) explains the dependent variable (strategic management), and correlation results of these variables are also included to check the relationship between the independent variable and dependent variable with the p- value of the entire variable is less than 0.01 at 0.05 significant level (see ANOVA table). Therefore, it is possible to conclude that 92.7%

of strategic management is explained by total quality management and there is positive significant relationship between these two variables with $p=0.000$, 76% of strategic management is explained by six sigma approach and there is strong positive significant relationship between these variables due to the p value of 0.000 at 95% confidence interval, as it is depicted in the above table only 49% of variation in strategic management is explained by hoshin planning and also there is positive correlation between them, strategic quality management explains strategic management with 80.8% variability and the last statement which is 56.7% of variation in strategic management is explained by ISO 9001:2000 and there is strong significant relationship between this ISO series and strategic management with p value of less than 0.01 at 95% confidence interval.

Table-16. ANOVA Tests

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	20.589	5	4.118	291.831	.000 ^b
	Residual	1.482	105	.014		
	Total	22.071	110			

Dependent Variable: SM_a

Predictors: (Constant), ISO, SQM, TQM, HP, SS_b

The ANOVA table tests the acceptability of the model from statistical perspective. The regression row displays information about the variation accounted for by the model. The residual row displays information about the variation that is not accounted for by the model. The regression and residual sums of squares are approximately 93/7, which indicates that about 93% of the dimension variation is explained by the model. The significance value of the F statistics is less

than 0.05, this means that the variation explained by the model is not due to chance. While the ANOVA table is useful test of the model's ability to explain any variation in the dependent variable, it does not directly address the strength of that relationship.

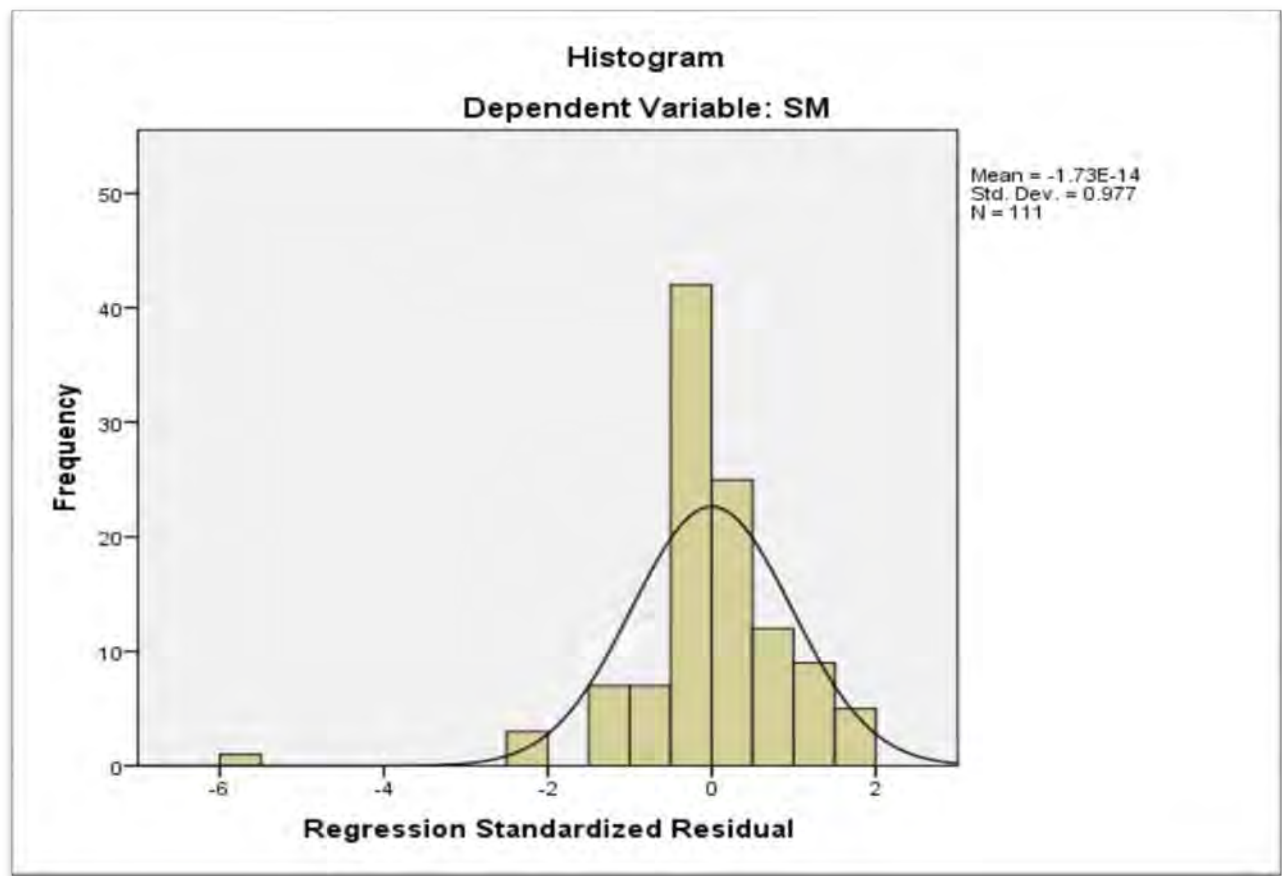


Diagram -1 Histogram

As a further measure of the strength of the model fit, the standard error of the estimate in the model summary table compared to the standard deviation.

A residual is the difference between the observed and model-predicted values of the dependent variable. The residual for a given dimension is the observed value of the error term for that dimension. A histogram or P-P plot for the residuals control the assumption of normality of the error term. The shape of the histogram does approximately follow the shape of the normal

curve and is acceptably close to the normal curve.

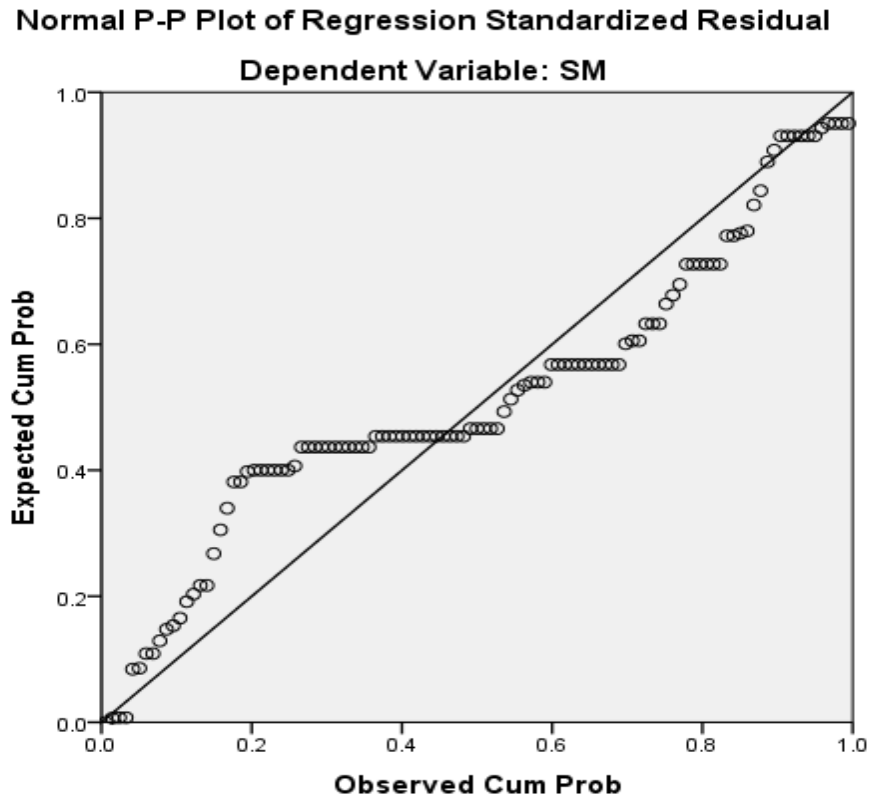


Diagram 2- Normal P-P plot of Regression Standardized Residual

The P-P plotted residuals should follow the 45-degree line. Neither the histogram nor the P-P plot indicates that the normality assumption is violated.

4.4. Description towards P erformance o f O verall A ctivities i n t he Textile Industry

In this section, the researcher addresses the open- ended questions towards the current practices of the industry in relation to strategic management process and identifying the improvements and difficulties that the industry experienced.

Question1. What are the current practices of the industry in relation to the strategic management process?

The industry was inquired about their current practices that were implemented in relation to strategic management.

The following results were addressed from different senior managers and executives of the industry:

- Employees undergo training and performance management practices
- Industry objectives are communicated from senior management to lower levels
- Customer satisfaction surveys were administered
- Long term planning is maintained
- Quality control to ensure that products and services are of consistent quality which leads to customer satisfaction
- Monthly meetings to analyze trends and implement strategies to adapt to those trends
- Employees' commitment to training and team building
- Conducting a SWOT analysis
- Strategies based on a five year plan which involves senior management and middle management
- ISO 9001:2000 procedures and policies were introduced

Question2. What are the improvement and the difficulty that the industry experienced?

It is evident from the results in the preceding sections the attitudes of employees indicates that the industry mostly incorporate quality practices in to strategic management and the industry have experienced some form of improvement through this integration, but difficulties are also arise due to different reasons.

The following improvements were recognized:

- A cultural change in the industry that is, quality is built into every operational process.
- Greater customer satisfaction
- Customer service and quality levels have improved
- Has increased the industry's competitive advantage
- Productivity increased and defects were eliminated
- The training of employees has improved the culture of quality in the organization

Other than the improvements that they attempted to change their industry by adopting the new philosophies, there is also some ambiguity that may affect the change of the industry. The following difficulties were highlighted:

- Lack of employee involvement because they do not want to adapt to change
- The older staff does not want to adapt to change because they are comfortable in their routine processes and procedures
- The extensive cost involved with integrating processes and the cost of training employees who are willing to undergo such a change.
- Senior management is in charge of the integration and have not effectively communicated this to other levels in the organization
- The cost of new technology is very high

It can be inferred that organizations who integrate quality practices and strategic management processes have experienced improvements in their employee morale, achieved high customer satisfaction, minimized defects and have increased productivity which eventually led to increased sales and greater profits. As a result, they have maintained a greater market share and have established themselves as market leaders in the Ayka Addis Textile Industry and Investment Group.

CHAPTER FIVE

5. CONCLUSION AND RECOMMENDATION

5.1 INTRODUCTION

This chapter presents the conclusions obtained from the research and it also provides suitable recommendations for organizations in order for them to improve their current practices and for future researchers to come up with better solution rather than studied on this research.

5.2 CONCLUSIONS

In a fast moving, a rapidly changing environment, an organization continues to set goals and objectives and formulate strategies to achieve them. However, due to the constantly changing industry and competition, further action needs to be implemented. Therefore, it has been identified that there is a need for an intervention like the integration of quality practices into the strategic planning process.

This integration is a rigorous and evolutionary process. Several political and economic changes have occurred in the world during the past few years and have revolutionized every sector of the global economy including the manufacturing sector. At the same time, the manufacturing industries become more quality conscious. This was mainly due to a demand for overall higher quality of products as well as services, by customers. Ayka Addis Textile and Investment Group which formed the basis of this study have also experienced these changes.

In order to carry out this research, a portion of quality and strategic management practices were identified, reviewed, and presented in literature part. An empirical study was then conducted in Ayka Addis Textile and Investment Group to determine whether they adopted quality practices in the strategic management process or not. A questionnaire was used to

determine if industry adhered to quality practices and strategic practices as independent tools or whether they in fact integrated them.

Based on the attitudes of respondents, among all dimensions, strategic quality management has the greatest integration in strategic management process which has a mean score of 4.3, while total quality management has little order of importance incorporation in strategic management which has a mean score of 4.28. Thus, even if the industry integrate these quality practices in to strategic management process according to its order of importance, the theory of DeFoe and Janssen (2001:4-6) supports integrating quality practices into the strategic management process becomes part of a foundation that is essential in supporting the management of quality in an organization.

The majority of respondents show their feeling on the application of integrating quality practices in strategic management is useful to the industry. Therefore, according to Brown (2005) the researcher can implies that, implementing a combination of quality practices in the strategic management is useful to solve problems and improve the quality of products within the organization, and it should receive organization-wide commitment. In addition, Lakhal, Pasin and Limam (2006:625-646) explains that the integration of quality management practices and strategic management provides a synergistic combination that is far more powerful than either of them being operated separately

The largest numbers of respondents are most probably agreed and they believe that quality management in the industry involves strong leadership and strategic planning. This may conclude that, according to Parast and Digman (2007: 802-818) quality management involves strong leadership and strategic planning that is recognized as a comprehensive management paradigm for enhancing organizational performance and competitiveness.

The correlation analysis result indicates that quality practices (.88) and its five dimension i.e total quality management(.96), six sigma(.87), hoshin planning(.70), strategic quality management(.90) and ISO 9001:2000(.75) have positive significant relationships with strategic management in Ayka Addis Textile and Investment Group.

From the regression result, it is clearly observed that quality practices such as total quality management (92.7%), six sigma (76%), hoshin planning (49%), strategic quality management (80.8%) and ISO 9001:2000 (56.7%) are explains and significantly affecting strategic management and then based on the results again the 93% of strategic management is explained by combined quality practices with p value of less than 0.01 at 95% level of confidence.

The respondents indicated the following some benefits from adhering to the integration of quality practices in strategic management:

- Greater employee participation in different area of thee industry
- Senior management's commitment and support to the integration
- A quality culture was created
- More emphasis on employee training services
- Maximizing customer focus and customer satisfaction
- Quality systems and strategic processes improved
- Senior management's decision to fully commit to quality practices
- The inclusion of quality practices and principles in the mission statement
- A program for continuous reduction in defects
- A plan to reduce scrap drastically
- Increasing the organization's direct relationship with customers

- Using customer requirements as the foundation for quality
- Management must actively communicate a quality commitment to employees of the industry to solve problems towards the quality of products.

It has been recognized from the results obtained in this study that there is a great need and importance for focusing on quality practices during the organization's strategic management process. Based on the correlation and regression results from the main study, there is a significant relationship exists between quality practices and the strategic management process. This relationship has resulted in an organization that is more attentive to quality procedures and customer demands. The result from the main study indicates, the selected industry is succeeded in this integration and has achieved extensive improvements in their operational performance and quality of their products. The implementation and integration of quality practices and strategic management has made the strategic management process much easier to apply because strategies are formulated in accordance to customer needs.

This study is a unique effort to assess the current status of quality management practices in the Ayka Addis Textile and Investment Group. The results of this study shows, the industry is well aware of the modern quality management concepts and philosophies. It reconfirms the importance of quality related issues. This industry also believed that it is accomplishing excellent standards in providing high quality products to their customers.

Even though previous studies suggested that relatively few organizations have adopted this integration, the analysis of results obtained from the questionnaires in the main study, indicates that an industry is placing more emphasis on quality in the strategic planning process. It was established that senior management are increasingly taking an active role in providing

information for the integration of quality practices in strategic management processes. This has led to better strategic decision making and successful strategic plans.

Therefore after observing the significant contributions of quality practices on strategic management processes, the integration can be defined as a comprehensive framework that enhances customer satisfaction, greater sales volume, more employee involvement, continuous improvement, an increased market share and a competitive advantage. As organizations strive to compete in a progressively changing environment, it is evident that strategic goals have to change in accordance to the environment. Consequently, it is advantageous to integrate quality practices with strategic management processes. It has been identified that this integration includes aligning organizational objectives to achieve higher quality, the involvement of all employees and commitment of senior management and leads to enhanced formulation and implementation of strategies. This resulted in improved performance of the organization and a superior competitive position.

The integration of quality practices and strategic planning helped senior management mould their industry's future and manage change by focusing on an ideal goal of where the industry could be in 5 to 10 years. Objectives and action plans need to be developed to achieve this goal. In conclusion the study has established an understanding of the importance and use of quality practices as a key element of an industry's strategic management process.

5.3 RECOMMENDATIONS

5.3.1. Recommendation for Industry

In this study, overall correlation and regression analysis gave positive results. Consequently, industry must take these variables i.e. quality practices and strategic management simultaneously if they want better results and improved Productivity in their industry. In this research it has taken five dimensions of quality practices to understand the usefulness when it's integrated in strategic management.

It is recommended that the industry continues focusing on the areas in which it is doing well and find ways to improve these areas by giving employee's feedback and encouraging open and honest feedback. The industry should become more conscious in ensuring quality, can strongly integrate in strategic management. They must gain information from the employee's perspectives and pay particular attention at what employees consider to be the main constraints to developing positive perceptions of aspects of the industry.

The following recommendations should be considered to this industry to be better integration of overall quality practices in strategic management process and then to be competitive and to come up with better strategies:

The industry can achieve continuous improvement in the form of improved operational and organizational processes. This can be accomplished by employing quality practices such as Strategic Quality Management (SQM) and Hoshin Kanri. According to Aravindan, Devadasan and Selladurai (2001:80-94) there are three phases of (SQM) which can lead to continuous improvement.

These three phases include quality concepts that are integrated into: the goals of the organization; in the formulation of policies and actions required for managing change and the deployment of the integration of quality practices in strategic management.

Hoshin Kanri, however, is a type of quality integrated strategic planning that orchestrates continuous improvement and breakthroughs. It selects the areas that need improvement, makes certain the right people get involved and that the improvement is implemented. This can be gathered from Tennant and Roberts (2000:77-90). Therefore managers planning for the future success of their organization should consider this integration.

Achieving a competitive advantage through increased productivity, a greater market share, higher customer satisfaction and loyalty. This can be obtained by employing a quality practice like Total Quality Management (TQM). This practice has assisted organizations in gaining a competitive advantage by making quality the central focus of the organization. This was evident from the authors Leonard and McAdam (2004:254-266), Oakland (2003:56) and Svensson (2006:22-29). It is obvious that organizations should consider integrating TQM within the strategic management process.

Productivity increased and defects eliminated. This can be achieved through the implementation of the Six Sigma approach which is a quality practice that helps eliminate or reduce defects. According to Harrold (1999:37) the Six Sigma approach is a process of achieving zero defects or getting as close to zero defects as possible.

Based on the results from the pilot and main study, it is apparent that the industry pursue the integration of quality practices in strategic management with great success. This success is evident in their industry's continuous improvement processes, greater customer satisfaction, sustainability in the market and increased profitability and sales.

5.3.2 Implication for Future Research

This research did appear to support the literature in providing future evidence that the importance of integrating quality practices into strategic management. This research was limited to a small sample within a single industry; future research should attempt to sample from a number of industries to investigate more about the use of incorporating quality practices into strategic management. A larger and more diverse sample will enable future research to integrate a greater number of statistical analysis techniques, improve the reliability and validity of the instrument, and generate more significant findings.

This research focuses on the use of integrating five dimensions of quality practices (TQM, SQM, ISO 9001:2000, six sigma and hoshin planning) in strategic management; future research should attempt to add different other quality practices to integrate it in strategic planning processes.

The research reported here has not look into the possible influences of mediating variables on the integration between quality practices and strategic management. Therefore future research can also look for mediating variables that can affect the integration between quality practices and strategic management, such as the impact of time pressure, level of educational realization and capacity of the industry is also included by future research.

In addition, the research approach that applied for this research is quantitative data and little of qualitative data. Future researches will incorporate more qualitative data in order to explore more about employee's perception relating to the integration of quality practices in strategic management process.

Therefore, Future research can overcome limitations of the present study in terms of number of respondents and focusing on the whole country that will help in generalizing the findings of the study.

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APPENDIXES

Appendix A - Questionnaire

ADDIS ABABA UNIVERSITY

SCHOOL OF BUSINESS AND ECONOMICS

MASTERS OF BUSINESS ADMINISTRATION (MBA) PROGRAM

Questionnaire Filled by Employees/management of Ayka Addis Textile and Investment Group

Dear Respondents:

I would like to express my sincere appreciation for your generous time, honest and prompt response.

Objectives:

This questionnaire is designed to collect information about the usefulness of integrating quality practices in to strategic management process. The information shall be used as a primary data in my research which I am conducting as a partial requirement of my study at Addis Ababa University for completing my MBA under the College of Business and Economics.

General Instructions

- There is no need of writing your name.
- In all cases where answer options are available please tick (✓) or encircle in the appropriate box.
- For questions that demands your opinion, please try to honestly describe as per the questions on the space provided

Thank you for your coopertaion!!

I Demographic Information

1. Gender: ☐ Male ☐ Female
2. Education level : ☐ Technical school graduate ☐ College diploma holder
☐ BA/BSc holder ☐ MA/MSc holder
☐ PhD holder others (please state) _____

3. In which department you are serving?

- ☐ Production/operation department
- ☐ Marketing/sales department
- ☐ Quality/inspection department
- ☐ Human resource/personnel department
- Others please specify -----

4. How long have you Worked in this textile and Investment Group?

- ☐ 0-2 years ☐ 3-5 years
- ☐ 6-10 years ☐ More than 10 years

II Questions Related to Quality Practices and Strategic Management

Please indicate your level of agreement with the statements. Thus, your answers to these questions will enable the researcher to explore the importance of integrating quality practices in to strategic planning.

Using the following rating scales under the columns, ‘**circle**’ only one number from the given numbers in the box after reading the items on the left side.’

The numbers represents: 1= strongly disagree, 2= disagree, 3= undecided/neutral, 4= agree, 5= strongly agree.

Remember: TQM= Total Quality Management

ISO= International Standard for Organization

No	Items	Strongly disagree (1)	Disagree (2)	Undecided/neutral (3)	Agree (4)	Strongly agree (5)
	TQM					
1	My organization implement total quality management	1	2	3	4	5
2	Due to different TQM initiatives adopted by my organization the overall product quality has increased	1	2	3	4	5

3	Due to different TQM initiatives adopted by my organization the overall customer satisfaction has increased	1	2	3	4	5
4	My organization is succeed after the implementation of TQM	1	2	3	4	5
5	My organization has succeeded in continuous improvement after the implementation of TQM	1	2	3	4	5
6	My organization uses TQM for improving its own performance	1	2	3	4	5
7	My organization uses TQM for generating competitive advantages	1	2	3	4	5
8	The implementation of TQM in my organization is critical	1	2	3	4	5
	Six- sigma					
1	My organization apply six sigma approach	1	2	3	4	5
2	Six sigma has significantly improved customer satisfaction at my organization	1	2	3	4	5
3	My organization is succeed after the implementation of six sigma	1	2	3	4	5
4	My organization has succeeded in continuous improvement after the implementation of six sigma	1	2	3	4	5
5	My organization uses six sigma for improving its own performance	1	2	3	4	5
6	My organization uses six sigma for generating competitive advantages	1	2	3	4	5
7	Six-Sigma has significantly improved my organization's profitability	1	2	3	4	5
8	Six-Sigma has significantly improved processes control of my work at organization	1	2	3	4	5
9	Six-Sigma process has significantly improved design process at my organization	1	2	3	4	5
10	The implementation of six sigma in my organization is critical	1	2	3	4	5
	Hoshin Planning					
1	My organization implement hoshin planning	1	2	3	4	5
2	My organization is succeed after the implementation of hoshin planning	1	2	3	4	5
3	My organization has succeeded in continuous improvement after	1	2	3	4	5

	the implementation of hoshin planning					
4	My organization uses hoshin planning for improving its own performance	1	2	3	4	5
5	My organization uses hoshin planning for generating competitive advantages	1	2	3	4	5
6	The implementation of hoshin planning in my organization is critical	1	2	3	4	5
	Strategic Quality Management	1	2	3	4	5
1	My organization implement strategic quality management	1	2	3	4	5
2	My organization is succeed after the implementation of strategic quality management process	1	2	3	4	5
3	My organization has succeeded in continuous improvement after the implementation of strategic quality management process	1	2	3	4	5
4	My organization uses strategic quality management process for improving its own performance	1	2	3	4	5
5	My organization uses strategic quality management process for generating competitive advantages	1	2	3	4	5
6	The implementation of strategic quality management process in my organization is critical	1	2	3	4	5
	ISO 9001:2000					
1	My organization is a compliant of ISO 9001: 2000	1	2	3	4	5
2	My organization is succeed after the implementation of ISO 9001:2000	1	2	3	4	5
3	My organization has succeeded in continuous improvement after the implementation of ISO 9001:2000	1	2	3	4	5
4	My organization uses ISO 9001:2000 for improving its own performance	1	2	3	4	5
5	My organization uses ISO 9001:2000 for generating competitive advantages	1	2	3	4	5
6	The implementation of ISO 9001:2000 in my organization is vital	1	2	3	4	5

	Strategic Management					
1	My organization adheres to strategic plans	1	2	3	4	5
2	For strategic management to be a success, my organization must not fail to follow their strategic plan	1	2	3	4	5
3	strategic management to my organization is very important	1	2	3	4	5
4	My organization have planned strategy to obtain competitive advantage	1	2	3	4	5
5	My organization conduct SWOT analysis clearly	1	2	3	4	5
6	The application of a SWOT analysis process to the effective operation of my organization is very important	1	2	3	4	5
7	After completing its external and internal analyses, my organization review the mission and goals in light of apparent threats/opportunity and strengths/weakness	1	2	3	4	5
	The Integration between Quality Practices and Strategic Management					
1	My organization integrate TQM in its strategic planning process	1	2	3	4	5
2	My organization integrate six sigma in its strategic planning process	1	2	3	4	5
3	My organization integrate hoshin kanri in its strategic planning process	1	2	3	4	5
4	My organization integrate strategic quality management in its strategic planning process	1	2	3	4	5
5	My organization integrate ISO 9001:2000 in its strategic planning process	1	2	3	4	5
6	Implementing a combination of quality practices in the strategic planning process is useful in my organization	1	2	3	4	5
7	My organization gained achievement after the integration of quality practices in to strategic management process	1	2	3	4	5
8	Quality plan have become an integral part of the overall strategic plan	1	2	3	4	5

9	Quality initiative have gained increased importance in strategic management	1	2	3	4	5
10	Quality management in my organization involves strong leadership and strategic planning	1	2	3	4	5
11	The principles of quality practices can help improve an organization's strategic planning process and therefore lead to better strategies	1	2	3	4	5

Additional Questions

1. What are the current practices of your organization in relation to the strategic management process?

2. If your organization is integrate quality practices into strategic management, what improvements has the organization experianced due to this integration?

3. If your organization is not compliant with ISO 9001:2000, what other management system certification does the organization implement?

4. What are the major challenges encountered in implementing quality practices in your organization —

5. What are the major challenges encountered when your organization integrating quality practices in to strategic management? If any?

6. If you have further comments/suggestion please —

Appendix B

The Output of Correlation

Correlations							
		TQM	SS	HP	SQM	ISO	SM
TQM	Pearson Correlation	1	.919**	.729**	.929**	.793**	.963**
	Sig. (2-tailed)		.000	.000	.000	.000	.000
	N	111	111	111	111	111	111
SS	Pearson Correlation	.919**	1	.774**	.905**	.794**	.872**
	Sig. (2-tailed)	.000		.000	.000	.000	.000
	N	111	111	111	111	111	111
HP	Pearson Correlation	.729**	.774**	1	.801**	.970**	.701**
	Sig. (2-tailed)	.000	.000		.000	.000	.000
	N	111	111	111	111	111	111
SQM	Pearson Correlation	.929**	.905**	.801**	1	.839**	.900**
	Sig. (2-tailed)	.000	.000	.000		.000	.000
	N	111	111	111	111	111	111
ISO	Pearson Correlation	.793**	.794**	.970**	.839**	1	.753**
	Sig. (2-tailed)	.000	.000	.000	.000		.000
	N	111	111	111	111	111	111
SM	Pearson Correlation	.963**	.872**	.701**	.900**	.753**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	
	N	111	111	111	111	111	111

** . Correlation is significant at the 0.01 level (2-tailed).

Appendix C

Results of Regression Analysis

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.966 ^a	.933	.930	.11879	1.975

a. Predictors: (Constant), ISO, TQM, SS, SQM, HP

b. Dependent Variable: SM

ANOVA ^a						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	20.589	5	4.118	291.831	.000 ^b
	Residual	1.482	105	.014		
	Total	22.071	110			

a. Dependent Variable: SM

b. Predictors: (Constant), ISO, TQM, SS, SQM, HP

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.008	.115		-.072	.943
	TQM	1.115	.091	1.081	12.217	.000
	SS	-.156	.072	-.163	-2.187	.031
	HP	.184	.083	.262	2.224	.028
	SQM	.067	.064	.085	1.060	.292
	ISO	-.217	.091	-.300	-2.378	.019

a. Dependent Variable: SM