What is the Driving Strategy?

Creative Business Management, State of the Art Technology or Smart Textiles, focusing on the T&C Industry of Pakistan

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Abstract

“It is change, continuing change, inevitable change, that is the dominant factor in society today.”

Isaac Asimov

The development in technology and the adaptation to strategies and production techniques has led the textile industry to a completely different path, to the one on which it was for decades. The current scenario shows the world at the verge of total transition. But this much advancement is not consistent. The countries across the globe can be divided into two distinct groups, developed and the developing countries. So is also the case with the development and the advancement within these countries and the one country Pakistan which is the focus in this paper.

The countries which were at the forefront in expansion and development during the industrial revolution are now leading the textile industry in all aspects and the developing countries which realized the importance of textile industry quite late, are now following the footsteps of these countries. Still there is a huge gap between their approaches and strategies, and that concerns not only the technology but other constituents of society such as education, policies and infrastructure etc.

The basic thinking and objective behind the study was to identify the strategies of the Pakistani textile and clothing industry with the consequences and results as a response of these adopted strategies. The textile and clothing industry of Pakistan has always been the backbone of the country’s economy. It contributes 54% of total exports and 46% of total manufacturing income which shows the importance of this industry in the overall economy of the country. So, in order to sustain and also to increase the current contribution level, it is necessary to sustain a certain level of competency and to increase this level either by improving the system, strategies, infrastructure or policies with or without the help of government.

The technology up-gradation has not only simplified the processes but also has helped different industries to extract favorable results and to shape the things according to the desires and needs. But still there are regions where the main focus of the textile industry is not on further development in the textile field but to sustain a specific level of production which they are doing by containing a certain level of technology and equipment to run their industry such as in Pakistan, while on the other hand the developing countries are involved in much more intensive development in textile field exemplified by smart and intelligent textiles, nano technology, bio mimics and tissue engineering.

In order to achieve the results, an extensive and detailed search was done which was then analyzed and finally interpreted to find the desired outcome. The study showed wide differences between the general approach and strategies of people and the industry of Pakistani textile and clothing industry from its main competitors in the same region of Asia and with the other countries.

Keywords: adaptation, advancement, expansion, industrial revolution, consequences, competency, infrastructure, intensive, development
Acknowledgement

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1 Introduction

1.1 Choice of the Subject

Textile industry has always been a major area of concern in the economical development of any country and the progress in this sector is not only limited to itself but is connected to many other fields such as defense, medical, sports and electronics. The progress in the textile sector depends on many things such as infrastructure, policies, trade agreements and technologies but one of the most important things is strategy. Strategy formulation is one of the most important tasks of the management team and one of the major issues that the textile industry of Pakistan along with other Asian Countries such as India, Bangladesh and Srilanka are facing right now. The inability of finding and choosing the right strategy is keeping these industries to make any further progress, while the countries such as Spain, UK, Italy and Sweden even without participating in the manufacturing of traditional products but instead by producing products and services other than the traditional ones are making enormous progress. This was the main reason of choosing this topic and to find out the reasons and solutions for this difference of strategies, so that it could be helpful in understanding the current situation and to find out a solution that could be beneficial for the industry in Pakistan as being the focus of our research work.

1.2 Background

Strategy formulation is a process which requires an intensive study of parameters such as current scenario analysis, company standing, the technology and the man power in hand, working environment and last but most importantly the approach towards goals completion. In fact, it is not a single person’s task but involves a bench of creative mind people who gathers together to decide the goals and the path to follow.

1.3 Problem Discussion

Pakistan is an agricultural country and has a very rich and fertile land perfectly suitable for cotton growth. Besides this, Pakistan is one of the few largest producers of livestock, that it not only exports, but also utilizes in leather and wool manufacturing, and which is then being refined further in the production of leather products and wool garments. A big share of the total exports is from the textile and clothing sector in Pakistan, but still after doing much of the work, and participating in the overall textile trade, still it is far behind its competitive industries and with the other textile exporting countries according to our point of view, besides having all the opportunities and resources. Right now, the Pakistani textile and clothing industry is facing many huge problems, such as electricity and Sui gas short-fall, infrastructure, government policies and overall economical situation, but above all, there is another problem, which is the proper formulation of strategy to run the industry and the industrial units. At present, the industries around the world has changed their path and focus of manufacturing traditional products to the manufacturing of high-tech and smart products having the characteristics of style with safety and elegance. Is there any difference of strategies, and if yes, then what is the difference? Why the focus of textile companies in Pakistan is totally different from that of other companies in different other regions? What is the main differentiating factor which separates these industries from Pakistani industries? What is the current standing of Pakistani Textile industry among other competitor
countries such as India, China, Bangladesh and Srilanka? And last but not least, what are the strategies and the focus of textile and clothing industries in Pakistan and what is the future of this sector in Pakistan? These are some of the questions that come into our mind while talking about the Pakistani textile and clothing industry and the problems related to finding out the strategy that is suitable for the overall industry. But the real question and objective of this research is outlined in the following question:

Which thing is holding back the Textile and Clothing industry of Pakistan from further development? Is it the proper formulation and implementation of management strategies, the technology or is there something else?

1.4 Scope

This study will give the answer to the question of what type of strategy Pakistani textile and clothing industry is following and what are the differences in strategies with other countries. What are the other related factors involved in the current position of this industry and what are the problems? In order to answer the question, it was necessary to consider the role of technology and development, and its importance for any economy to flourish. The technology has enabled the mankind to break new grounds in each and every field, and textile is one of those. It is difficult to judge the main difference of strategies between textile industries around the world but we can get an idea about the differences because of their main gap between technologies, infrastructures and education gap. The industries with advanced technologies and infrastructures have now moved up to a new level and are not any more involved in the traditional production that the rest of the undeveloped industries are involved in which is an evident of the increased production ratios from the Asian Countries. These industries have long gone achieved a certain level of perfection in their systems through a combination of creativity and innovation with constant improvement in their technology. The other underdeveloped industries are still on the same path they were following for a long time such as traditional cotton production and the relevant product’s manufacturing or have started their journey by following the same path as these developed industries. The study will also provide in-depth analysis of different leading companies, their working and the strategy they are following in order to be competitive among other companies within and outside Pakistan.

1.5 Delimitations

The problems that we faced during our thesis were:

1- The lack of information about the strategies of different textile and clothing units related to their operations and working in different departments and their hesitation to share their confidential data that in their thinking might be misused

2- Mixed-up and unauthentic information about industrial units that made it difficult to pinpoint the problems and to conclude the results

3- No proper survey has been done by any entity in the country on the textile and clothing industry in Pakistan, hence making it difficult to find out the problematic areas and areas of growth that can pinpoint the progress as well as the decline

4- Difficulty in interpreting the results obtained from the gathered data because of the lack of scientific techniques used in industrial research in these areas
5- The lack of any available published date from the Pakistani educational sector or the industry related to the field of textiles in accordance with the topic of research because of the unawareness of technical and managerial staff about parts of the topic such as smart textiles and creative business management.

6- It was difficult to find out the level of progress and the research being done as a whole related to improvement in technology, infrastructure and the overall industry because of no internal connection between any of the industrial units, institutes and such other entities.

2 Structure of the Thesis

The structure of our thesis is described in this chapter.

2.1 Opening Pages

The preamble consists the title, the abstract, acknowledgements, the table of contents, a list of figures and a list of tables.

2.2 Introduction

In the start of the main text, detailed information about the study has been given in different sub sections, and those sections are:
Choice of the subject
Background
Problem discussion
Scope
Delimitations

2.3 Methodology

In this section, the methods of gathering information, analyzing the collected data and finally the interpretation to find the conclusion have been defined not in detail but in a much condensed manner.

2.4 Theory

This section gives an overall view of the two main concerning areas of this research along with the history of textile industry in Pakistan, because without describing a little about the history of how it started and how the development started, it would be very difficult to correlate with the development time and how far textile industry has come from its first existence to the present condition in Pakistan. The main sections are:

- History of Textile Industry in Pakistan – comprises detailed information about textile and clothing industry of Pakistan
- Creative Business Management – strategy and the CBM tools have been discussed in this portion
- State of the Art Technology – introduction about use of high-tech machinery and equipment in the textile and clothing industry has been discussed
- Smart Textiles – A detailed overview of the smart textiles and its applications has been discussed in this section
2.5  Analysis

The strategies of the leading textile and clothing companies and their working are discussed in this section and a critical analysis has been done that will decide their working strategy. The section contains the analysis of the three areas already discussed in the theory along with the analysis of the textile and clothing units of Pakistan and their strategies.

- Creative Business Management – the techniques and the implementation of CBM and its tools in the Pakistani Textile industry are analyzed in this section
- State of the Art Technology – the use of technology and high-tech machinery and its importance in the manufacturing process as well as in management processes has been discussed with relation to Pakistani textile industry and related sectors
- Smart Textiles – the amount of work being done in the Pakistani Textile and Clothing industry related to Smart textiles has been discussed

2.6  Discussion

In this section, the answers to the questions being asked in the start of the research will be answered one by one.

2.7  Results

Findings are given at the end along with suggestions for the future. References are listed as per required format.

3  Methodology

The main idea of the research was to identify the basic differences between strategies and approaches towards goal achievement in the textile and clothing industry of Pakistan and to check if it is only the strategy, the technology or something else which is affecting the progress of the industry as a whole. Data collection, categorization, analysis and interpretation to find out the results are the steps that are usually involved in a thorough research study and finally in finding out the solution. In order to authenticate the results the research should be done according to some set rules in accordance with predefined methods and techniques of research that makes the research authentic. We have used a blend of different research techniques in our thesis to reach to a solution. We have tried to gather authentic data and our basic source of data was the World Wide Web along with the published articles, books and other sources. In addition, we have done a little survey about the textile industry of Pakistan with the help of a pre-set questionnaire which we did with some of the leading textile units of Pakistan along with an interview at National Textile University with the Head of Garments Manufacturing Department under the faculty of Engineering and Technology.

3.1  Type of Research

The types of research being utilized to find out the required information about the Pakistani textile and clothing industry and the applied strategies are described in this section.
3.1.1 Descriptive Research

In descriptive research method, the researcher seeks the required information with the help of already held surveys and available facts without any kind of control over the variables. The use of information already available in journals, articles and books written on different topics related to our research work was the method in this research type. The articles published in different journals from different authors either from the industry or from different educational institutes along with the written books on different topics such as strategy, business management, technology and the textile industry were taken into account during data gathering. The research being done by these authors on our relevant issues were used as basis to find out the results. (C R Kothari, 2008)

3.1.2 Analytical Research

The researcher has to gather information and all related facts and figures and then has to do an analysis of the gathered data and has to evaluate it in the light of that analysis. The information and the data gathered about the textile industry and the strategies has been analyzed in order to find out the present situation of textile industry of Pakistan and the strategies being used in the industry. All the facts, current accounts, import and export figures of the last consecutive years, the share of textile and clothing industry of Pakistan for the country and within world along with the overall standing among different countries were the sources that helped us in further analysis of the industry, its working and current standing. (C R Kothari, 2008)

3.1.3 Applied Research

This type of research ultimately provides a solution for any existing problem and in our case; the strategy is the problem for which a solution has to be found. We have evaluated the data and have found the missing link in the Pakistani textile and clothing industry strategy and have finally advised solutions to deal with the situation. The answers collected in response to the questionnaire helped us finding out the results and above all these interviews gave us an insight about the industry and the deficiencies which are keeping the industry to make further progress. (C R Kothari, 2008)

3.1.4 Empirical Research

This research is based on personal experience and observations and after carefully looking into the systems and the strategies in the light of our industrial experience; we have suggested some fruitful ideas and propositions to be done in the future. Both authors have been attached to this industry for a long time and have seen the working conditions, infrastructure, management strategies, type of technology being used by different segments of the industry and the approach towards industrialization and goal achievement which has helped us in finding out the missing links and the problems of the industry. (C R Kothari, 2008)

3.2 Data Collection

Data collection is the most important phase in any research and it is very important not to miss any link. Decision making is done on the basis of this data collection and a small mistake can change the overall figure which demands proper focus, interest and hard work. The collection of data involved sources such as books, published articles, World Wide Web, interviews and
questionnaire. In addition, all the sources were authentic, the books and the data for citation was pre-tested and have been gathered from trusted sources.

### 3.2.1 Questionnaire

In order to get the real picture about the industry strategies, a questionnaire with a set of open-ended and close-ended questions were made and then asked from the representatives of different leading textile units in Pakistan. The questionnaire has been given below.

<table>
<thead>
<tr>
<th>Question # 1: What is the focus of your company and the strategy in accordance to the focus and the vision of the company?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question # 2: On what grounds, the strategy of the company has been made?</td>
</tr>
<tr>
<td>Question # 3: Is there any difference of strategy between your company with the rest of the companies in Pakistan?</td>
</tr>
<tr>
<td>Question # 4: If there is any difference of strategy, then what is the difference and the differentiating factor?</td>
</tr>
<tr>
<td>Question # 5: Is creative business management an approach or strategy in your business management or not?</td>
</tr>
<tr>
<td>Question # 6: What is the role of technology in the progress of your company?</td>
</tr>
<tr>
<td>Question # 7: Is your company dealing with smart textiles, if yes, then at what level?</td>
</tr>
<tr>
<td>Question # 8: Do you think your company and the industry as well are making any progress with comparison to our neighboring countries such as China and India?</td>
</tr>
<tr>
<td>Question # 9: What is the actual standing of your company with respect to other competitive companies?</td>
</tr>
</tbody>
</table>
| Question # 10: What is the total number of people employed at your company and what is your net sales value? }
Question # 11: Evaluate the importance of below mentioned issues with respect to your company policies and working in a manner of 1= Not Important, 2= Considerable, 3= Medium Importance, 4= Important, 5= Very Important.

Answer:
   a) Strategy
   b) Profit
   c) Growth
   d) Company standing
   e) Policies

Question # 12: Evaluate the importance of below mentioned issues with respect to your company policies and working in a manner of 1= Not Important, 2= Considerable, 3= Medium Importance, 4= Important, 5= Very Important.

Answer:
   f) Management
   g) Technology
   h) Research & Development
   i) Smart Textiles
   j) Production consistency

3.2.1.1 Choice of the Questions

The choice of the questions has been made keeping in mind the strategic preferences for products of different textile and clothing units in Pakistan along with their production capacity and current standing among competitors within and outside Pakistan according to their thinking and evaluation. The questions not only cover the management prospective but also the prospective from marketing and research side.

3.3 Data Categorization

The proper line up and categorization according the different groups in the research is very important because a small mix-up can create problems in setting things down in an orderly fashion. In order to do it in a proper manner, the paper has been divided into different parts such as the introduction; giving an overall picture of the paper, theory; describing about the basic concepts and details of chosen portions, analysis; analyzing all related aspects, facts, and figures and finally conclusion; giving a clear picture which is the essence of this industry and its problems along with the concerns about future for the betterment. The same rule was adopted in the categorization of the available material to avoid mixing and to find a solution easily.
3.4 Data Analysis

Data analysis was very important in our project and the use of authenticated data was the base of this research project. The data being analyzed should justify its choice and that is what we have tried to do in this project. The data being analyzed was taken from official governmental sources such as All Pakistan Textile Mills Association (APTMA), Textile Institute of Pakistan, Ministry of Textiles and other sources such as the leading textile and clothing units of Pakistan and analysis was done by careful categorization and evaluation.

3.5 Data Interpretation

The exact interpretation of the analyzed data gives the required results as being discussed in the introduction and the exact match and the related findings validate the correct interpretation of the gathered data. The published data on different subjects related to textile industry of Pakistan and the verdicts of different authors in their articles about this industry has supported our interpretation and results and this interpretation is in accordance to the previously held surveys which authenticate the results.

4 Theory

4.1 Textile and Clothing Industry of Pakistan

The textile and clothing industry of Pakistan has always been the backbone of the country’s economy. According to the figures mentioned by All Pakistan Textiles Mills Association, it contributes 54% of total exports and 46% of total manufacturing income. According to USITC Publication 3671, this sector is growing only because of the fact that the interest rates are low and after quota removal, the industry is open to export throughout the world without any limit. (USITC Publication 3671, 2004, p.F-36)

The textile industry of Pakistan from its very first beginning is producing only cotton textile and apparel because of wide domestic cotton growth and that’s the main reason of increased exports only in this sector. But as the world around us is changing so rapidly, so is the demand for textile products and by seeing this demand, there has been a shift in the textile products from the production of cotton yarns to cotton blends and the new products being produced in Pakistan are a mix of synthetic yarns, fabrics and apparel. (USITC Publication 3671, 2004, p.F-36)

The productivity level in the weaving sector is very low because it involves mostly small scale family oriented operators who produce poor quality fabric but there are proper large and organized units that are producing cotton fabrics and their productivity level is quiet good, and some of the units equipped with state of the art facilities are producing very high quality cotton fabric that has quiet a worth in the outside world. (USITC Publication 3671, 2004, p.F-36)

Below given table show the percentage of Pakistani textile and clothing industry share of export to the world trade in Million US$.
All Pakistan Textiles Mills Association (APTMA) is the general body to manage all the issues related to the textile and clothing units in Pakistan. According to the research conducted and data summarized by APTMA, there are total of 396 large industrial units, of which, 315 are spinning, 44 are weaving and 37 are composite units. Besides this, there are units and small production lines being run on a very small scale that can be found in worker’s homes. The data was collected in the year 2001 and at that time, these small scale units were estimated to be 4500 and a simple guess regarding the current situation will give us an overall figure of 6000, and the reason of this small change is the current situation faced by the Pakistani Textile Industry and due to which many small scale industries have completely shut down. (USITC Publication 3671, 2004, p.F-39)

Dr. Milan Sharma, in his book Textile Industry of India and Pakistan, has beautifully portrayed the picture of both textile industries of India and Pakistan. According to him, this is an age where each and every part of the world is getting integrated and with this situation around the globe, it is necessary for both the industries to equip themselves accordingly. In the case of Pakistan, because it is the focus of this research, it is the need of the hour to invest in the technology up gradation to increase the competitiveness and the overall production efficiency because only this improvement will ensure higher export levels. (Sharma, 2006, p. 263)

As mentioned above, being the oldest industry of Pakistan but still struggling to achieve according to its capacity, the only missing thing is the competitiveness that is affecting it very badly. Dr. Milan Sharma has mentioned the two key problems in losing the competitiveness which are technological obsolescence and slow rate of modernization. Also it is missing the investment factor both financially and technology. (Sharma, 2006, p. 266)

4.2 1st Strategy: Creative Business Management

4.2.1 Creativity

What is Creativity? Creativity according to Chris Bilton and Stephen Cummings is an intuition or aspects of experience that can change the human experience, while Koestler has described it as Bisociation. According to them, it is creative because it shows the world differently and makes the act pleasant and fruitful. (Bilton & Cummings, 2010, p.5)
4.2.2 Creative Business Management (a Business Tool & a Strategy)

Creative business management is the creative management of individuals creating the artworks of ultimate quality. It could be any new and innovative idea and its proper implementation. It’s all about the creative employees coming up with new ideas and then the proper management and implementation of those ideas which are practical and discard those ideas which seems unrealistic at present or in the near future.

The connection between creative business management and the industry in itself is very important. It is actually the way of managing the business in a proper manner because it deals with the day to day problems faced by any individual and the business, and its timely solution with the help of already defined tools and measures.

4.2.3 Purpose & Importance of CBM

The most important things for any organization in order to be successful are cost, efficiency, innovation and creativity, while creation and innovation in most of the cases requires a lot of investment which usually increases the overall cost, increasing time and reducing efficiency, and many believe that creation and innovation either in process or in product is only related to industries like IT, Film industry or in visual effects or graphics production, but this thinking is wrong. The management of business, creativity and innovation is not only related to the fields as mentioned earlier but the fields such as Textile, Medical, Chemical and Electronics etc are the fields in which the world has seen much development in both creation and business terms. In order to be competitive and to deal with the challenges of rise in cost with process effectiveness and overall efficiency, industries employee creative individuals having the ability to critically thinking according to situation with the ability to innovate and lead. The purpose of employing these creative people is to take on-time critical decisions about process management or the product according to the merits and de-merits, and to play a major role for the organization. More an organization have such creative individuals, more it differentiate itself on the basis of creativity, innovation and an overall increased market success and share. Examples of the involvement of these creative individuals in innovation process and the management process are Product development and marketing campaigns. (S. Seidel & M. Rosemann, BPTrends)

According to Stefan Seidel & Michael Rosemann, the creativity oriented business management process depends on different characteristics as mentioned in the figure below that allows the proper management of process without compromising on the creativity while increasing the impact and overall efficiency.
4.2.4 CBM Tools

4.2.4.1 CBM Skills

There are some fundamental skills which a leader should possess in order to handle a team of creative minds which are:

**Ability to Change:** In idea generation process, in accordance with the changes in the market condition, the team should be able to change their operations and directions immediately.

**Social Skills:** It is one of the many important points of mixing with the team members and with the other employees of other departments and through this interaction many other bright ideas come in the minds which are very helpful in innovation.

**Planning:** Planning among all other skills, is the most important step in strategy making. Proper target making and breakdown of duties are the core activities in planning. Alongside these, all other related delays due to experiments and implementations should also keep in mind while doing the planning for the department.

**Experience:** An experienced leader directs the employees in the right direction and in the light of his long experience, whatever step he takes most probably is right and fruitful in broad perspective.
4.2.4.2 Team Management (Single and Multiple)

Team management is very crucial in this process. There are two ways with the help of which creative business team leaders manage their team.

1. Giving the employees the flexibility to choose their own
2. Giving the team members leverage without imposing strict management rules and processes.

In case of managing multiple teams, the following tasks should be done in order to get the output.

1. Balancing of multiple teams separately so that the work of one teams does not affect the work of others
2. Research and development should be kept apart while there should be a link between the teams for information flow and the engineering department should have an easy access to these two departments in order to give them the real suggestions because they know about the things more in depth while doing it on a wide scale

4.3 2nd Strategy: State of the Art Technology

4.3.1 State of the Art

It can be defined as “the highest level of development either in process, technique, science or in a device at present times”. (WorldWeb Online, 2011)

4.3.2 Technology

Technology can be defined as “the purposeful application of information in the design, production and utilization of resources, and in the organization of human activities”. (Business Dictionary, 2011)

Technology can be divided into five categories such as tangible, intangible, high, intermediate and low, and then each category has some sub categories, but these are beyond the scope of our research.

4.3.3 Purpose and Importance of State of the Art Technology

The importance of up-to-date technology is evident, but the main purpose and the reason of having a certain technology level is the ability to compete with the competitive industries which not only allows the industry to gain profit but also the country’s economy to grow because the impact is directly related to economic performance. In order to do so, industries as well as the countries has made it compulsory to equip them with up-to-date technology either by increasing their technology level or by importing technology to compete with the world. U.S.A, U.K, Japan and many European countries such as Sweden, Germany, France and Italy etc understood the need way back and improved their technology level over the years. That’s the reason these countries are now leading the world in terms of technological advancement while on the other hand, the countries like Pakistan, India, Sri Lanka, China and many other countries in the African region still have to do much in order to compete with these advanced countries. The reason was that, it was a strategic preference for them and for their industries to be a part of
the technologically advanced nations in each and every field like engineering, medicine, textile, or mechanics etc.

4.3.4 The Journey

“With the development of the internet, and with the increasing pervasiveness of communication between networked computers, we are in the middle of the most transforming technical events since the capture of fire”. (Barlow, 1995)

It is very difficult to find out an exact account of the human history and the era of technological development through which human race has passed on to find out its present face and the current situation in the field of textiles. It has been suggested that British were the pioneers in the textile industry development. At start, it was a labor intensive process but with technological development, machines took over the place and now it is only one section which require excessive manpower and that is stitching. The real essence of technology is not its use but the control and all things depend on this factor. Product and the quality of product are some related examples. The quality of products mainly depends on two things, process and machinery. Process of manufacturing is very crucial because it defines the properties of the product but machinery is the main object which makes the real product. The term state of the art technology in this thesis has a very wide context. On one hand, it suggests the use of high-tech technology and machinery in the management and manufacturing process mainly used in the industry worldwide, while on the other hand it suggests the use of same or even advanced high-tech technology and machinery in the product development process, and while talking about developed products, it means highly sophisticated and engineered products related to smart and technical textiles. (McQuire, 2006)

Although technology development has played its role in the development of smart and technical textiles and we cannot ignore its role and will discuss a little bit of it while analyzing the field of smart textiles but our main focus would be the use of high-tech technology in the manufacturing process and in management.

4.4 3rd Strategy: Smart Textiles

There is technology in each and every corner around us and we can very easily feel it, because as discussed in the earlier portion, it has a very long history. It is this technology and the development that has removed the gap between many different fields and by bridging up, it has united different and totally separate fields of science and engineering together and we can find these materials and structures in Smart Textiles. (Tao, 2001, p.2)

Smart materials and structures according to Xiaoming Tao can be defined as “the materials and structures that sense and react to environmental conditions or stimuli, such as those for mechanical, thermal, chemical, electrical, magnetic or other sources”. They can be further divided into other sub categories such as passive, active and very smart materials, but it is beyond the scope of our research. (Tao, 2001, p.2, 3)

Aerospace, telecommunications, transportation and buildings are some of the fields in which the world has seen much research and development from last ten years or so with the use of smart and intelligent materials. Even after ten years, we can still say that the technology is new but even then, some of the industrial applications are at a stage where they can be applied at
once with all perfections but still there is much more to do and achieve in this field. (Tao, 2001, p. 3, 4)

There is still much to overcome and achieve and the industry has to face many challenges for the proper research and development in the field of smart technology and it is obvious that it will take time. The need of the hour is to open the boundaries of research to everyone so that the development could not be restrained only to a small bunch of people or countries but it should spread like wildfire in each and every corner of the world in order to benefit the mankind. (Tao, 2001, p.4)

4.4.1 Purpose and Importance of Smart Textiles

The main purpose of having smart textile products is to facilitate and safeguard the human beings and to provide them ultimate comfort and since the invention of this new field, the world has seen many great applications revolving around smart materials which include the use of smart materials in sports equipment and sportswear, healthcare and safety equipment, buildings and bridges and also in sensing the blood pressure, temperature of the human body, stress and strain in order to safeguard mankind. This technology is not only participating in textiles, garments, sports and constructions but is very much participating in the field of biology. The tissues and organs made from these smart materials have the ability to grow and function as the other parts of the human body and much research is under process in this field in order to facilitate the lives of people. (Tao, 2001, p.4)

4.4.2 Research Areas of Smart Textile

Below given are some of the research areas under smart textiles. (Tao, 2001, p.4)

1- Conductive polymers
2- Thermal sensitive materials
3- Chemical responsive materials
4- Micro and Nano materials
5- Photo sensitive materials
6- Fiber optics
7- Neural networks and control systems
8- Bio mimics
9- Tissue engineering
10- Wearable electronics and photonics

5 Analysis

5.1 Strategy

5.1.1 What is Strategy?

The concept of strategy basically has come from military. It is difficult to define strategy because it has very wide meanings. Henry Mintzberg has given four simple definitions of strategy.
• Strategy is a plan, or something equivalent – a direction, a guide or course of action into the future, a path to get from here to there
• Strategy is a pattern, that is consistency in behavior over time
• Strategy is position, that reflects decisions to offer particular products or services in particular markets
• Strategy is perspective, a vision and a direction

(Mintzberg, 1994, p.23, 24)

Strategies differ from company to company and either depends upon many things such as approach, system and environment. But basically the strategies highlight the social system in which they are applied in order to get the results. (Whittington, 2001, p.5)

5.1.2 Strategy Formation

“Strategy formation is a planning process, designed or supported by planners, to plan in order to produce plans”. (Mintzberg, 1994, p.32)

There are a number of strategic formulation models such as The Design School Model, The Initial Ansoff Model and The Mainline Steiner Model (Henry Mintzberg, 1994) but the one model according to the thinking of authors which perfectly suits the composition of textile and clothing industry worldwide and also in Pakistan is The Design School Model that covers all the external and internal factors needed to formulate a perfect strategy. But the need of the hour is to properly implement this model into Pakistani textile and clothing industry after critically analyzing it and to come up with a broad final strategy perfectly suitable to internal conditions and external environment with the available capacities and capabilities.
5.1.3 The Design School Model of Strategy Formation

Strategy formation is a process of conception that uses the basic ideas to design the strategy. Through this model, all the aspects, external and internal, are streamlined in order to get a clear picture of the surroundings in the form of threats and opportunities with an insight into the organization in the form of company’s strengths and weaknesses. The competences and the success factors are calculated for the creation of a perfect strategy which is backed by the factors like social responsibility and the management values. The choice of a final strategy is not an easy task. The strategies should not be very complicated but very simple and fully formulated and once the strategy has been completely accessed, then the process of strategy implementation started along which come budgets, schedules and incentives. (Mintzberg, 1994) P.37-39)
5.2 1st Strategy: Creative Business Management

Pakistani textile and clothing industry was using the conventional methods of business management from a very long time but has transformed its approach and management techniques a little bit over the years and still the change is under process but it is going with a very slow pace. Textile is almost a family oriented business inherited to and run by coming generations in the same family which is a big reason of slow change in the management techniques but the upcoming generation and the management is much more aware of the current strategies and scenarios and are now building their businesses with completely new setups and thinking. The philosophy of creative business management is new to these industries, but the percentage of adaptation to these management rules and strategies is much high as compared to the old days.

The majority of people in the textile industry lack the skills needed to run the business involving creativity and innovation but with the induction of new blood in the form of qualified engineers with the relative study background and experience have now changed the situation. Although there are some sectors like IT and Telecommunication, where after the emergence of international companies and their participation into the setup building, there has been a huge shift in the general thinking, and the people are now open for change.

There had been a shortage of professional people to run the industry on strong grounds because the people that were running the industry were the ones with basic education but with lot of experience in the conventional manufacturing with the hesitation to change themselves or the system. Even the owners were lacking the skills needed to run an industry of individuals with creative minds and capabilities. Due to their inability to think critically, they could not plan in the case of sudden change according to the market condition and they could not change the course of the action because they had not planned it accordingly but there has been a slow change in the overall situation and the positions has been took over by the new blood with the courage to change and to streamline the processes on strong grounds with new management strategies and techniques.

Pakistani textile and clothing industry is on the verge of change and continuous but slow growth, as compared to its competitors such as India and China and to some extent to Bangladesh also, but a bit late because of the adaptation and improvements in the business management strategies which we can see in the growth patterns of the Pakistani textile and clothing industry with comparison to its immediate competitors.

Below given graph shows us the import value of apparel products from Pakistan among its immediate competitor countries to the USA, one of the major importing country of apparel products from the Asian region. It clearly states the situation that, besides the entire available infrastructure and other favorable conditions, the share of Pakistani apparel industry is much less as compared to its competitors.
Another proof to validate the growth in the textile and clothing sector can be seen in the next two tables showing the textile and clothing exports of Asian Countries, the change in their level and the share in the total world exports. Although the data is a bit old but it covers a long time ranging from 1990 to 2005.
<table>
<thead>
<tr>
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<td>6.8</td>
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<td>10,391</td>
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<td>5.1</td>
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<td>10,038</td>
<td>9,706</td>
<td>-3.3</td>
<td>4.8</td>
</tr>
<tr>
<td>Japan</td>
<td>5,871</td>
<td>7,138</td>
<td>6,905</td>
<td>-3.3</td>
<td>3.4</td>
</tr>
<tr>
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<td>7,850</td>
<td>12.0</td>
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<td>1,356</td>
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<tr>
<td>Singapore</td>
<td>903</td>
<td>977</td>
<td>916</td>
<td>-6.3</td>
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<td>Iran, Islamic Rep. of&lt;sup&gt;b&lt;/sup&gt;</td>
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<td>817</td>
<td>848</td>
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<td>3.1</td>
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<td>221</td>
<td>8.4</td>
<td>0.1</td>
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<tr>
<td>Sri Lanka&lt;sup&gt;b&lt;/sup&gt;</td>
<td>25</td>
<td>149</td>
<td>136</td>
<td>-8.8</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Table 2: Textile exports of Asian Countries from year 1990 to 2005

Source: R Adhikari & Y Yamamoto, The Textile and Clothing Industry: Adjusting to the post-quota world
Pakistani textile industry was under crisis during the 90’s but after that, it has seen a tremendous growth and has come far ahead from its previous position. We can see a continuous and steady growth in the textile sector and the exports from Pakistan when we compare it with its other competitors from Asia. The table given below shows the performance of Pakistani textile and clothing industry in terms of exports and the increase in its level among other Asian competitors from the year 1995 to 2007.

Table 3: Clothing exports of Asian countries from year 1990 to 2005

Source: R Adhikari & Y Yamamoto, The Textile and Clothing Industry: Adjusting to the post-quota world
Creative business management techniques and strategies are not only applicable only in the textile sector but other industries such as agriculture, manufacturing and services sector and the progress in those sectors can also be measured with the growth in GDP. Below given graph shows the comparative GDP growth rates of three neighboring countries in the Asian region for a period of 1960 till 2008.

Table 4: Textile and clothing exports of Asian Countries

<table>
<thead>
<tr>
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<td>China</td>
<td>13,918</td>
<td>24,049</td>
<td>37,967</td>
<td>41,050</td>
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<td>21,297</td>
<td>35,112</td>
<td>43,214</td>
<td>15,830</td>
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<td>8,646</td>
<td>10,205</td>
<td>7,010</td>
</tr>
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<td>4</td>
<td>Republic of Korea</td>
<td>12,343</td>
<td>4,957</td>
<td>17,710</td>
<td>12,710</td>
<td>10,291</td>
</tr>
<tr>
<td>5</td>
<td>India</td>
<td>4,288</td>
<td>4,110</td>
<td>8,468</td>
<td>9,968</td>
<td>8,285</td>
</tr>
<tr>
<td>6</td>
<td>Thailand</td>
<td>11,882</td>
<td>3,251</td>
<td>15,133</td>
<td>11,891</td>
<td>3,015</td>
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<td>7</td>
<td>Pakistan</td>
<td>4,256</td>
<td>1,611</td>
<td>5,867</td>
<td>4,532</td>
<td>2,144</td>
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<td>8</td>
<td>Indonesia</td>
<td>2,713</td>
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<td>9</td>
<td>Japan</td>
<td>7,178</td>
<td>7,178</td>
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<td>10</td>
<td>Thailand</td>
<td>1,937</td>
<td>5,008</td>
<td>6,845</td>
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</tr>
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<td>11</td>
<td>Bangladesh</td>
<td>432</td>
<td>989</td>
<td>2,401</td>
<td>393</td>
<td>5,067</td>
</tr>
<tr>
<td>12</td>
<td>Malaysia</td>
<td>1,129</td>
<td>2,266</td>
<td>3,395</td>
<td>1,270</td>
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<td>13</td>
<td>Philippines</td>
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<td>2,833</td>
<td>2,536</td>
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<td>2,369</td>
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<tr>
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<td>Sri Lanka</td>
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<td>1,922</td>
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<td>2,812</td>
</tr>
<tr>
<td>15</td>
<td>Singapore</td>
<td>1,496</td>
<td>1,464</td>
<td>2,960</td>
<td>907</td>
<td>1,825</td>
</tr>
</tbody>
</table>

Although the above data shows a consistent progress in the field of textiles but this progress is not smooth. It fluctuates at many different stages, and according to our thinking the reasons behind this fluctuation are not only the management problems, but also the policies implemented and changed by the government affecting the overall growth of this sector. In addition to this, the overall political scenario and the current phase of Pakistan where it is struggling to deal the war on terror, the customers are hesitating to give new orders to Pakistan because of security reasons which are damaging the overall situation very badly.

5.3 2nd Strategy: State of the Art Technology

Pakistani textile and clothing industry especially the weaving sector with grey fabric production at small or medium level can be characterized by the lack of modern technology and its use as mentioned earlier in the introduction about Pakistani textile and clothing industry, but there are many vertically integrated units as well as separate large industrial units with state of the art technology in the field of spinning, weaving, processing and garments manufacturing doing very well in their field of expertise. (Musleh ud Din & Ghani, Pakistan Institute of Development Economics)

The ginning of cotton has usually been done with outdate machinery and as mentioned earlier in the introduction about Pakistani Textile Industry, the weaving sector is dominated by small family owned power loom owners that produce low quality fabrics due to outdated machinery usage in the fabric manufacturing. The processing industry is using old machinery for dyeing, bleaching and printing and these machineries are almost 15 years old in most of the textile processing units and so is the quality level of finished product but many of other processing units are equipped with modern and state of the art machinery and are giving quality products
as per customer demands. The garments sector can be characterized by limited resources, design and Product development capacity. There are huge process losses and the technological involvement is insufficient but at a certain level with comparison to its immediate competitors internally and externally, these equipment is sufficient enough for the type and level of products Asian countries are producing and exporting. (Musleh ud Din & Ghani, Pakistan Institute of Development Economics)

In order to be competitive and to produce the products according to the customer requirements and specific quality standards, Pakistani textile industry has imported much machinery and equipment but the import has decreased over the number of years because of increased import duty and the reduced tendency of textile units to further invest because of current situation of the textile industry.

### Table 5: Import of Textile Machinery in Million US$ from Year 2004-10

**Source: Federal Bureau of Statistics, Horizon Securities (SMC-Pvt) Ltd**

In Pakistan, there are many textile machinery manufacturers but this sector is till underdeveloped and much is needed to be done in this sector. There is too much gap between the supply of the machinery from local manufacturers and the actual demand from the industry and to bridge the gap, import is the only option. There are two corporations in the public sector namely Textile Machinery Corporation (TMC) and Spinning Machinery Corporation (SMC) with many small industries in the private sector. (Ministry of Textile Industry Research, Development and Advisory Cell, 2002-07)

The major sources for textile machinery imports are Japan, China, Switzerland, Germany and Italy. Below given is the average total import share of industrial machinery for the year 2002-07 by trade volume.
The government of Pakistan has tried to overcome the situation by introducing several schemes to finance the industry by giving loans to individuals and to multiple units for different range of periods lasting for almost 7 years plan and had benefited a lot during the years 2004-07. Due to the leverage in the import taxes and such these financing schemes, the investment rate in the import of industrial machinery has increased much after these implementations. (Ministry of Textile Industry Research, Development and Advisory Cell, 2002-07)

The textile vision 2005 was such a step to improve the overall condition by upgrading technology and to achieve economies of scale. According to the suggested vision, industry was suppose to invest in different areas according to a certain pattern and scheme in different sectors of textiles and the industry observed an increase in the amount of textile machinery import during the phase from 2000 to 2005, but the set targets were not achieved. Even after the completion of that period, still the industry is importing textile machinery but it is not according to the targets and the level it should be. Below given figure show a comparison of textile machinery investment in different sectors according to set targets and actual completion in billion US$ and time respectively.

There is much to be done to cop up with the situation and in order to do this, Musleh ud Din and Ejaz Ghani from Pakistan Institute of Development Economics have provided a vision of growth for the textile industry of Pakistan and under that vision, following objectives completion is the need of the hour.

- The focus on research and development in order to build the capabilities that are up to the level and which can help in the manufacturing processes
• Technological up gradation in accordance with the level of technology the world is using now
• The import duty on technology and equipment should be removed in order to enable the industrial units to upgrade their level of competency
• Different programs relating to research promotion should be started to develop an approach towards technological improvement
• The above mentioned programs should be on different basis such as in industrial units, public and technological institutes etc

(Musleh ud Din & Ghani, Pakistan Institute of Development Economics)

5.4 3rd Strategy: Smart Textiles

Pakistan being an industrial country with a rich agriculture sector is heavily involved in the production of textile materials but these materials or products are mainly conventional products. The reason behind this lack of involvement in the production of smart materials is the technology, infrastructure and approach. Right now Pakistan is passing through a phase in which there is no support from government or the industrial sector to build competency for the production of smart textile products. This is the main reason why the textile sector is focusing only on the production of conventional products and is not involved in any value added process of producing smart products. (Memon & Noor Zaman, 2007)

We are in an age where the survival is very difficult and it is only for the fittest. Many countries including Germany, US, UK, Japan and France have already abandoned to produce the conventional products and are focusing on the production of smart products but on the other hand, Pakistan is totally the opposite. In Asian continent, China and India have also entered this field. China is progressing by leaps and bound while India has also foreseen the bright future and has started developing the industry accordingly. (Memon & Noor Zaman, 2007)

Pakistan is dependent on the countries as mentioned above and import the products related to medical, military, marine and aerospace and spends a lot each year on these imports. Also there is no investment from any banking sector or financial institution to upload the systems and industry in order to build the future and to be at the same level with the other countries because they fear the loss of money and do not invest in new competency development programs rather than in the same existing market. (Memon & Noor Zaman, 2007)

Pakistan, China and India started their journey in this field almost at the same time, but they have done many efforts and are now much ahead from Pakistan. According to Muhammad Idrees Ahmed, Textile Commissioner and Abdul Majeed, Chairman, Associated Textile Consultants, Pakistan is still in the awareness stage and much effort is required to establish a proper state. There are some smart textiles such as Agrotech, Buildtech and Medtech in which Pakistan has started making investments. The government of Pakistan has very lately understood the condition. The setting up of product innovation centers at Textile Institute of Pakistan (TIP) and National Textile University (NTU) along with a series of held seminars are the first steps to practically enter in this field, but still a lot has to be done in this field because of the lack of knowledge and the monopoly between the developed countries in the field of smart textiles.
6 Analysis of the Leading Textile & Clothing Industry Units & their Strategies

As mentioned previously, in the introduction part about the textile and clothing industry of Pakistan, there are almost 396 large industrial units, out of which 315 are spinning, 44 are weaving and 37 are composite units, but till now there is no data available about their current share in the overall export or their standing among other companies in the field of textile. In fact, there has never been any comprehensive survey that was conducted to check the overall status and the individual position of these textile units, so that a clear picture could be available for the government about those units and their performance, so that they could be treated according to their efficiency and performance. The only data available is the percentage share of the exports and the GDP figures of the overall industry and such related figures.

6.1 Textile Units of Pakistan

Below mentioned are some of the leading textile and clothing units in Pakistan in detail and their involvement in different domains.

6.1.1 Nishat Group of Companies

Nishat is one of the leading textile groups in Pakistan. Following are some important facts about the group.

- Four core businesses namely Textiles, Cement, Banking and Power Generation
- Vertically integrated textile units
- Manufacturing facilities equipped with state of the art technology
- ISO (International Organization for Standardization) certified company
- Own power generating facility
- Annual Turnover is 17 billion Pakistani rupees out of which 14 billion is from textiles (US$ 283 million)
- 54% increase in sales in the year 2011 over the year 2010
- More than 190,000 spindles with 150 tons/day production capacity
- 629 looms with a production capacity of 7.4 million meters of fabric per month
- Stitching units equipped with almost 1300 modern machines with a capacity to process 2 million meter fabric per month
- extremely competent and experienced administration
- lacking focus to capture international market share through product development

6.1.2 Crescent Textile Mills

Following are some of the important facts about the company.

- 1st ever composite textile unit of Pakistan
- ISO certified
- 120,000 spindles with a spinning capacity of 48 million kgs/yr
- Weaving capacity of almost 53 million sq. mt/yr
- Capacity to process/finish 42 millions mt/yr
- Almost 5000 employees
• Total sales revenue of 14,759 million Pakistani Rupees in year 2011 with a 36% increase over the past year
• State of the art machinery
• Professional management teams
• Research and development facility along with training schedules for employees

6.1.3 Chenab Group
Following are some of the important facts about the group.
• Vertically integrated unit having involvement in spinning, weaving, processing, stitching, power generation and water treatment
• Own brand and companies with the names ChenOne, ChenSoft Limited, CGI UAE and Chenab USA
• ISO certified
• 19000 spindles, almost 500 looms with a capacity of 36 million sq. mt/yr
• Production capacity of more than 70 million mt/yr fabric and its usage in made ups and garments
• State of the art technology
• Development of innovative and cost effective products for the local customers

6.1.4 Masood Textile Mills Limited
Following are some of the important facts about the group.
• Leading unit in Knitting industry with their own spinning, Knitting, processing and apparel divisions and according to their figures, the largest knitwear exporting company in the country
• ISO certified
• Experienced management team
• Turnover of above 6000 million Pakistani Rupees until the year 2009
• Production capacity of 14400 spindles & 300 bags per day
• A very wide customer portfolio including customers like Levis, Kohls, Tommy Hilfiger and JC Penney etc

6.1.5 Sapphire
Following are some of the important facts about the group.
• One of the largest manufacturers and exporters in Pakistan
• Annual turnover of 435 million US$
• More than 14,000 employees
• Brand range includes H&M, Gap, Old Navy, American Eagle, Zara, Mango, Lindex, JCP, Tommy Hilfiger, Pull & Bear and CK etc
• Vertically integrated unit with involvement in the spinning, knitting, weaving, processing, garments and home textile
• ISO certified
• Most modern setup with state of the art technology from Europe, Japan and USA
Highly experienced and qualified management
- Spinning capacity of 5 million kg of yarn per month, weaving capacity of 7 million yards of greige fabric per month and 2.73 million meters of dyed fabric per month
- Knitting capacity of 10,000 kg per day

6.1.6 Azgard-9

Following are some of the important facts about the group.
- Vertically integrated group with state of the art technology
- Diverse customer relationship with companies from Europe, Canada and USA
- Working with the shortest lead times in the industry
- Technology origin is from Japan, Italy, Germany, Switzerland, Austria, Belgium and UK
- Highly qualified and experienced management
- Capacity to produce 100,000 meters of fabric per day
- ISO certified

Although above mentioned units are doing much in their field of expertise and are growing rapidly, but still they lack the focus with inconsistent growth and a combined unsatisfactory performance in comparison to the textile industry of Pakistan. The main factors behind this unsatisfactory performance according to our thinking are the loop holes in the infrastructures, the proper follow-up, the vision to understand the change around the world and the need to alter their systems and working accordingly.

The incompetence and difference between the textile and clothing industry of Pakistan to the industry around the world have been identified by Zafar Mahmood and Rehana Siddiqui in a very authoritative manner. The industry is not utilizing its resources in a healthy way and it means that the knowledge capital and human capital has not been utilized in a proper way without any openness in the system and the government policies are such that they are neither supportive nor encouraging. (Mahmood & Siddiqui, 2000)

The equipment is old, the laboratories are underfunded with underpaid scientists and the industry lacks a proper market oriented research to identify the future vision and path to follow. In addition, whatever in hand technological equipment and expertise, the industry is unaware of it and heavily depends upon external help and assistance which is a big hurdle in the self growth. The basic problem for Pakistani textile and clothing industry is to equip itself with the latest technology and it is the only way through which Pakistan can gain technological competency and besides this another factor is the level of education. The private sector also hesitates to invest in technology development programs because these programs are quiet time consuming and require a huge amount of investment. The industry lacks the functional links between the science and technology system that comprises of universities, research institutes and industry and it not only means the internal linkages within the country but also the external links with the universities, research institutes and industries around the world. (Mahmood & Siddiqui, 2000)

The unpredictable conditions of the Pakistani textile industry with the ever changing government policies and instable political conditions have caused much damage to the overall situation and the customers both national and international are now hesitating to give any
further orders to Pakistan which is a big reason of a decrease in the overall textile exports of Pakistan. Below mentioned graph along with the table shows the export performance of Pakistani textile sector from the year 2006 to 2009 and the textile exports figures from the year 2008 to 2010 respectively. (Aftab A. Khan & Mehreen Khan, 2010)

![Graph showing Pakistan textile exports from 2006 to 2009](image)

**Figure 7: Pakistan Textile Exports for the years 2006-09 in billion US$**


<table>
<thead>
<tr>
<th>Textile Exports</th>
<th>2008-09</th>
<th>2009-10</th>
<th>2008-09</th>
<th>2009-10</th>
<th>%age Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw &amp; Processed Cotton</td>
<td>241,979</td>
<td>340,185</td>
<td>2.48%</td>
<td>3.34%</td>
<td>40.58%</td>
</tr>
<tr>
<td>Cotton Yarn</td>
<td>1,058,954</td>
<td>1,283,994</td>
<td>10.83%</td>
<td>12.62%</td>
<td>21.25%</td>
</tr>
<tr>
<td>Cotton Cloth</td>
<td>2,106,840</td>
<td>1,879,459</td>
<td>21.55%</td>
<td>18.47%</td>
<td>-10.79%</td>
</tr>
<tr>
<td>Knitwear</td>
<td>2,054,853</td>
<td>2,060,727</td>
<td>21.02%</td>
<td>20.25%</td>
<td>0.29%</td>
</tr>
<tr>
<td>Bed Wear</td>
<td>1,526,642</td>
<td>1,640,869</td>
<td>15.62%</td>
<td>16.12%</td>
<td>7.48%</td>
</tr>
<tr>
<td>Towels</td>
<td>546,591</td>
<td>602,867</td>
<td>5.59%</td>
<td>5.92%</td>
<td>10.30%</td>
</tr>
<tr>
<td>Ready-made Garments</td>
<td>983,443</td>
<td>962,481</td>
<td>10.06%</td>
<td>9.46%</td>
<td>-2.13%</td>
</tr>
<tr>
<td>Other Textile Materials</td>
<td>1,256,996</td>
<td>1,406,549</td>
<td>12.86%</td>
<td>13.82%</td>
<td>11.90%</td>
</tr>
<tr>
<td>Total</td>
<td>9,776,297</td>
<td>10,177,131</td>
<td>100.00%</td>
<td>100.00%</td>
<td>4.10%</td>
</tr>
</tbody>
</table>

**Table 6: Sector wise textile exports of Pakistan for the year 2008-10**

*(Source: PACRA, Sector study, Textile sector – FY11)*
As mentioned earlier, Pakistani textile and clothing industry is facing shortage of electricity and Sui Gas for the production processes. There has been a short fall of electricity and there is not much electricity to fulfill the demand of the industry, because over the number of years, the consumption has increased much as compared to its production, and the use of alternative resources for textile production has increased the overall product prices and has decreased the amount of orders only because of available comparative and much better priced products from other suppliers outside Pakistan. Below given graph shows the comparison between the electricity production and consumption over the last few years showing a clear picture about the current situation faced by the textile industry.

![Figure 8: Comparison b/w electricity production and consumption](source)

According to a recent study about the textile sector of Pakistan conducted by PACRA (The Pakistan Credit Rating Agency Limited), the textile industry is facing many problems and is at high risk involving management, finance and governance etc. Below given figure shows the level of risk being faced by the industry in different areas.
6.2 Analysis of the Research Questionnaire

The results of the questionnaire that were asked from different units already mentioned above along with some other units have been given here.

Question # 1: Company Focus and Strategy

Figure 9: Risk Matrix
Source: PACRA, Sector study, Textile sector – FY11

Figure 10: Company focus and strategy
Source: Authors
Question # 2: Strategy Making is based on

![Bar chart showing strategy making based on various factors. Source: Authors.]

Figure 11: Strategy making
Source: Authors

Question # 3: Difference in Strategy

![Pie chart showing the difference in strategy. Yes: 63%, No: 38%. Source: Authors.]

Figure 12: Difference in strategy
Source: Authors
Question # 4: Differentiating Factor

Figure 13: Differentiating factor
Source: Authors

Question # 5: Creative Business Management: a business strategy

Figure 14: CBM, A business strategy
Source: Authors
Question # 6: Role of Technology

Figure 15: Level of CBM implementation
Source: Authors

Figure 16: Role of technology
Source: Authors
Question # 7: Smart Textile and its Role

Figure 17: Smart textiles and its role
Source: Authors

Question # 8: Progress with Comparison to India and China

Figure 18: Progress with comparison to India & China
Source: Authors
Question # 9: Actual Standing

Figure 19: Actual standing
Source: Authors

Question # 10: Employed People

Figure 20: Employed people
Source: Authors
6.2.1 Outcome of the Questionnaire

The results of the questions as shown in the above figures as mentioned earlier not only depict the management point of view but also the marketing and the research side. Here the outcome has been described in a more focused and condensed generalized manner.
• Strategy making is a process that depends on different aspects, and companies while deciding upon a final strategy, focus on different points such as capacity, sales and relations etc, depending on what kind of situation suits them the most, and that is the same case with each other industry
• Research and development along with technology has the main role in deciding the strategy and a big portion of the Pakistani textile and clothing industry is already aware of it but still the strategic differences among the textile units are creating problem in the combined growth of the Pakistani textile and clothing industry
• Creative business management although playing a vital role in the industry but is not fully implemented in all the industry sectors
• Technology is the backbone of textile and clothing industry
• Smart textiles has the least importance and there is much to be done even to start progressively
• Growth and profit has been given the highest importance and not the strategy and management leaving it vulnerable for internal as well as external threats. This phenomenon affects the productivity levels and the long run outcomes.

6.3 Interview

In order to get a real picture about the industry and the institutions with their role and the involvement in the strategy formulation process, it was necessary to take the views from another angle, so for this reason, an interview was conducted with Mr. Zafar Javed, Chairman, Department of Garment Manufacturing, National Textile University. NTU is the oldest and the leading institute in the textile related education sector of Pakistan.

6.3.1 Overview of the Questions Asked

The asked questions were basically related to the current performance of the textile and clothing industry of Pakistan along with the performance and the involvement of governmental and private sector institutes and research centers in the overall growth of this sector. Although the main focus was to find out the prevailing overall strategies of the textile and clothing sector but the main point was to find out the reason behind having these strategies, and the required steps to improve the overall situation.

6.3.2 The Outcome

The outcome of the interview was almost the same to that of our research about the textile industry, but there were certain important points of numerable information about the industry for better understanding.

The following points were highlighted during interview.

• The industry lacks professional culture for the industrialization process
• The industry is full of unprofessional, but experienced, close minded but hardworking people blocking the way of further research and development from their usual daily routine work
• There is not any single strategy for the industry because of short termed unrealistic strategies and approach with ever changing government policies
There is no interdisciplinary connection between any organization, institute or any other entity making it difficult to focus on specific ideas and things.

The industry is technology oriented a little bit but using the same old machinery from decades and yes if importing any machinery, then it is only for the conventional production and not for the extension such as smart textiles.

The field of smart textiles is almost new to Pakistani textile industry although the industry first knew about it in the early 2000’s but still it is in awareness stage. It still needs time because the first step towards smart textiles is from technology and system upgradation while Pakistani textile industry is still facing the challenges of infrastructure and policies.

The main disadvantage or the focal point for the industry is the approach and the short term goals. The approach should be changed which is damaging the industry quite badly.

7 Discussion

After analyzing the industry, system, working scenarios, level of technology and management techniques, it is possible to give the answers to the questions highlighted in the introductory part.

Question #1: Is there any difference of strategies among Pakistani textile and clothing industry and the industry around the world? If yes, then what is the difference?

Answer: Regarding the first part of the question, yes, there is a difference of strategies among Pakistani textile and clothing industry to the textile industry around the world. The industries around the world that were involved in the production of conventional products have abandoned it and have moved on to produce value added futuristic products while Pakistan among some other countries such as Bangladesh, Taiwan, India and some other underdeveloped countries with a potential to export in this field are still producing the conventional products and are using the same skills, machinery and techniques to sustain the position and even are thinking to improve the situation with the available resources and capabilities. The reason is that, Smart textiles and its share in the overall production is very small, so it is not a big case that Pakistan is not focusing or doing much in the field of smart textiles because on the other hand, it is involved in the bulk production.

Question #2: Why the focus of textile companies in Pakistan is totally different from that of other companies in different other regions?

Answer: There are many reasons of the difference in their focus that includes their approach towards product specifications and its finalization. The product finalization further depends upon the level of technology, the infrastructure and the facilities available in the country for their smooth production. The production facilities available in the industry only allows the production of basic products with minimal properties and the manpower available is also not much qualified to do the work involving superior workmanship so that’s why the focus of Pakistani textile and clothing industry is only towards the production of conventional products. In other regions such as in the countries of Europe, the US and UK, they have the proper infrastructure, the up to date technology, the proper supply chain for all kinds of products range so they can afford to produce products other than the conventional ones, so that is the reason why they have abandoned the production of conventional products and are now
focusing on the production of value added products with the help of all these above mentioned facilities with perfectly aligned management techniques.

**Question # 3: What is the main differentiating factor which separates these industries from Pakistani industries?**

**Answer:** There are many factors affecting the overall situation such as Technology, policies, approach, infrastructure and management techniques but the most important of all is the one mentioned in the start i.e., Technology. The industries and especially the developed ones have understood its importance since a long time ago and only because of their vision about the importance of technology in the future has enabled them to break new grounds in this field while the rest of the world is dependent on them and their technology and this is one of the main reason of so much import of textile related and other such machinery to underdeveloped or developing countries such as Pakistan, India and Bangladesh.

Besides this, there is another very important factor which is the proper implementation of management techniques. The West has invested a lot and has done much research in understanding and implementing such management techniques that are suitable for perfect manufacturing environment with state of the art facilities.

**Question # 4: What is the current standing of Pakistani Textile industry among other competitor countries such as India, China, Bangladesh and Srilanka?**

**Answer:** Right now, Pakistani textile industry is going through a difficult time. The country which a few years ago was the shining star in this field among other countries in Asian continent is now facing many problems. The problems such as unavailability of Electricity and Sui Gas for industry, floods and unfavorable government policies are dismantling the whole industry. According to the development scene in the above mentioned countries, it can be easily said that China is at the top with India at the second position and then, comes Pakistan, Bangladesh and Srilanka. But in the current scenario, many industrial units from Pakistan are shifting to Bangladesh because of better business conditions and it can be clearly seen from this movement that if the same situation existed for a couple of years in Pakistan, then the industry will be either finished or will be in a very bad condition.

**Question # 5: What is the strategy and the focus of textile and clothing industries in Pakistan and what is the future of this sector in Pakistan?**

**Answer:** The strategy and focus of the textile and clothing industry in Pakistan as mentioned above has never changed from its very first existence and is following the same way of production as it is because of its focus on cotton production. Rest of the world has moved to non woven and synthetic fiber products while the Pakistani textile industry is still focusing on cotton products. The technological development and the industry are under constant change and growing but with a slow pace. As per the latest situation, the future of Pakistani textile industry although very blur, but is in case of proper technological investment can be very bright. The reason is the dependency on the technological advancement and all the things are related to it including textile, healthcare, sports and all related infrastructures.
8 SWOT Analysis

In order to understand the real situation about the industry in Pakistan, it is important to realize the internal and external factors about the industry. The internal factors such as the strengths and weaknesses and the external factors like opportunities and threats are the real decisive points.

**Strengths**

- The labor cost is very low as compared to other competitive industries and countries

![Per hour labor cost in US$](image)

*Figure 23: Per hour labor cost in US*

*Source: (IBEF) India Brand Equity Foundation*

- Pakistan is supposedly among the first five largest cotton producer in the world
- Pakistan has 54% export through textile sector only
- Easy raw material availability

**Weaknesses**

- There has been a build up image of low price products among other Asian countries depicting an overall image of low quality products
- The technology being used in textile industry of Pakistan is not up to the level
- No work is under process in the field of smart textiles which is the future of textile world
- Current political conditions are not favorable for the textile industry
- Unfavorable governmental policies are affecting very badly to the textile industry
- Low level of managerial capabilities is another weakness
- Labor force with low level of skills
- Not enough value addition
Opportunities

- Availability of basic infrastructure to setup any project and idea
- Potentially capable industrial units that can handle any type of research and development projects
- Huge segment and potential in home textile sector in the recent times
- Institutions and research centers in place that can help in the future research and development projects
- Improvement potential by working closely with the customers

Threats

- Increased share of value added products from China and India over the last few years has grabbed many of the orders from the outer world
- Price pressures with competitor industries from other countries in Bangladesh and India due to favorable policies and techniques is a big hurdle for Pakistani textile industry
- Rise in cotton prices has increased the product price in Pakistan and it is difficult to compete on price level basis

9 Conclusion

Textile and clothing industry although very versatile in its extent and a lot of development is under process right now but there is a considerable difference between the type of processes, techniques, strategies and approaches according to area and industry. After assessing the Pakistani textile and clothing industry in detail, we can easily distinguish these points of differentiation within their working and their systems.

- There has been not very significant but a little difference of strategies and techniques that are running the textile industry of Pakistan from other industries around the world except some countries such as India, Bangladesh, Srilanka and Taiwan etc only because of having short term strategies and instant policy changes instead of long term and prevailing policies helping out the industry to survive and ultimately gain profit
- The one thing which is keeping the country at the back hand and is stopping the industry to excel further is the low level of technology and the use of old machinery in the manufacturing process hence effecting the overall product quality which is evident from the fact that the target which was set by the government of Pakistan to achieve a certain level of technology over the years was not achieved and even the ratio of textile machinery import in order to equip the industry with state of the art technology has decreased showing the behavior towards industrial and technological improvement
- Focus of Pakistani textile and clothing industry is towards production consistency and process improvement in order to streamline the deliveries and the problems related to matching time lines only because of the current situation in the country regarding the availability of natural resources like Sui Gas and electricity which is making it even difficult to run the industry on half of its capacity
- The use of unqualified and unskilled manpower in the manufacturing and management processes is having a very bad effect on the overall industry which is making it difficult to run the industry on professional grounds and this is the basic reason of not having creative individuals in the industry and what so ever are in the
industry are still very less in number, hence making it difficult to fully implement CBM strategies

- At the time when the rest of the world other than Asian countries has overcome the problems related to overall infrastructure necessary for smooth flow of textile products, Pakistani textile industry is still facing the problems related to basic infrastructure and issues of supply and demand chain management

- There has been a huge gap in the research and development side between Pakistani textile industry with neighboring industries of China and India, and the industries around the world which is evident from the current development of smart textiles in Pakistan and one of the main reason is the dependence on cotton production and its products while ignoring the use of synthetic yarn and products and the research to develop different items in this range

- The movement of production facilities outside the country like Bangladesh, only because of the current unfavorable condition is making it even more difficult for further development in the field of textile and technology. The industrial shut down and the inability to complete the orders on time has caused this movement

- The family owned textile business and the owner dictated thoughts are a setback for the textile industry because it is a hurdle in creative business management

- Smart textiles is the future of the textile industry and Pakistani textile industry is still at the verge of basic awareness about this field. This stage of basic awareness has prolonged only because of the unprofessional industry attitude, the lack of technology required for smart products and the approach towards sticking to the production of conventional products rather than trying new ventures according to the needs and demands of the customers around the world only because of the hesitation of investment and private groups to invest in different projects and not to lose their money

Pakistan is still following the footsteps of the developed country’s industry strategies but in a very slow speed. The pace of the improvement is very slow. The changes are inconsistent and the policies changes frequently with current law and order situation causing the industry shut down and an overall bad impact on economy.

### 9.1 Future Concerns

“When it comes to the future, there are three kinds of people: those who let it happen, those who make it happen, and those who wonder what happened”.

*John M. Richardson, Jr.*

The above mentioned saying perfectly applies to the world of textile industry. It is not a single entity’s work but a combined effort. The developed countries and industries should transfer their knowledge and experience to the developing industries so that in the light of their experience, the developing industries can carve their path and can also participate in the race rather than being at the end. Same is the situation with Pakistani textile and clothing industry and its dependence on the external aid in terms of technical, educational and managerial support. There are basic differences in the management approach across the value chain in all the companies regardless of their operations and area. The need of the hour is to focus on strategies of having single approach towards strategy formation and these differences in the
value chain should be removed and the adoption of a single strategy and approach is the requirement.

The most important factor which should be the prime focus is the influence and the use of technology and automation in the textile and clothing industry because all other things are related to the advancement in technology. There are certain trends in the industry with quite irrational feelings and thinking about them in certain areas. The reasons are:

- Lack of information about available technology and data in a certain field
- Unwillingness to adopt the change
- Search for shorthand solutions instead of long term thinking
- Incompatible systems, technology and the negative approach of investors to avoid big investments in heavy budgeted research and development projects
- Barriers in information sharing such as culture and ego
- Traditional and backward thinking of industry leaders and managers

In order to deal with these problems, a shift in approach and strategy is necessary. Strategic preferences should have to be changed according to current conditions. The implementation of technology and management tools such as ERP, SCM, CRM (Customer Relationship Management) and PLM at the start level is the need of the hour, which can change the possible picture of the industry and the approach towards further adaptation which has been started, not to a great extent but at a small level in different industrial units.

In addition, Capacity Building is the answer to all above mentioned problematic questions. It is basically the investment in technology, people and practices that facilitate industries to attain their directorial goals.

9.2 Final Verdict

Someone after looking deeply into the Pakistani textile and clothing industry can say about the current performance about this industry that it could be the fault of improper strategy formulation caused either by unqualified or non creative management, unsatisfactory technology level or approach towards goal achievement, but according to our point of view, it is not only the strategies, technology or the approach, but the current conditions which this industry and above all the country is facing right now in terms of political instability, unavailability of resources and unfavorable policies, and only because of these facts, the situation is not good and this industry is facing much pressure and is on the verge of collapse.

Also, if an industry is progressing in the bulk production of basic textile products then it is not mandatory to produce smart textile products, because the manufacturing of smart textile products requires specific infrastructure, technology and facilities, and also these products are not manufactured in bulk more often as compared to these basic products. So, it is not a problem for a country like Pakistan not to produce smart textile products and focusing only on bulk production of basic textile products, but even then it has started progressing slowly in the field of Medtech, Buildtech and Agrotech.

Finally, in an industry where the main focus is more on growth and profit rather than the strategy formation which actually pave the way to further growth and development has to suffer because the strategies are not meant to be long lasting and after paying for a short time,
the individual unit, industry or the economy has to suffer and same is the case with Pakistan because of short term industrial policies made by the government and improper strategy formulation by the industry.
References

Abdul Majeed Interview, Pakistan still in awareness stage in technical textiles, [Online],
Available at: http://www.youtube.com/watch?v=Whj9F7MBMIA [Accessed on October 10, 2011]

Aftab A.Khan & Mehreen Khan, “Pakistan Textile Industry Facing New Challenges”, Research

“All Pakistan Textile Mills Association, About Us”, [Online], Available at:

“Azgard9”, [Online], Available at: http://www.azgard9.com/about.htm, [Accessed on October
27th, 2011]


on October 27, 2011]

“Chenab Limited: Vision and Mission”. [Online], Available at:

Chris Bilton & Stephen Cummings, 2010.”Creative Strategy, Reconnecting Business and
Innovation”, Antony Rowe Ltd, UK [Accessed on September 28, 2011]

“Cost competitiveness of Pakistan’s textile and apparel industry”, DAI/Nathan Group, USAID,
2009, [Accessed on October 27, 2011]

“Creative Management: Balancing multiple teams”. [Online], Available at: http://product-

“Creative Management Skills”. [Online], Available at: http://product-vity.com/creative-
management-skills/, [Accessed on July 5th, 2011]

“Crestex, Machinery”. [Online], Available at: http://www.crescenttextile.com/siteindex.htm,
[Accessed on July 23rd, 2011]

“FAOSTAT”, [Online], Available at: http://faostat.fao.org/site/291/default.aspx, [Accessed on
September 25th, 2011]

H.R.Sheikh, “Performance of Pakistan as textiles and clothing exporter from Asia”, Textile

Henry Mintzberg, 1994.” The Rise and Fall of Strategic Planning”, Pearson Education Limited,
UK [Accessed on October 2, 2011]

Idrees Ahmed Interview, Technical Textile Upcoming Product, [Accessed on October 10, 2011]


“Textiles and Apparel, Market & opportunities”, IBEF, [Accessed on October 27, 2011]


“What is Creative Business Management?”,[Online], Available at: http://productivity.com/what-is-creative-business-management/, [Accessed on July 5th, 2011]


**Appendix**

**Sapphire Group**

<table>
<thead>
<tr>
<th>Question # 1: What is the focus of your company and the strategy in accordance to the focus and the vision of the company?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer:</td>
</tr>
<tr>
<td>Focus: Maximize Sales Revenue ensuring top line product quality</td>
</tr>
<tr>
<td>Strategy: Penetrating, Aggressive</td>
</tr>
<tr>
<td>Vision: Progressive, Dynamic &amp; Diversified</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question # 2: On what grounds, the strategy of the company has been made?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer:</td>
</tr>
<tr>
<td>1) Maximizing Sales Revenues</td>
</tr>
<tr>
<td>2) Maximizing Market Share</td>
</tr>
<tr>
<td>3) Delivering top line product quality</td>
</tr>
<tr>
<td>4) Reaching high end customers / top brands</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question # 3: Is there any difference of strategy between your companies with the rest of the companies in Pakistan?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer: Yes, difference is one of the highest production capacities with very diversified &amp; large...</td>
</tr>
</tbody>
</table>
product range, at the same time swift decision making & risk taking measures.

<table>
<thead>
<tr>
<th>Question # 4: If there is any difference of strategy, then what is the difference and the differentiating factor?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer: The biggest difference in strategy is continuous research &amp; development, risk taking measures to take opportunity of any favorable situation of the market at the right time and very aggressive sales approach.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question # 5: Is creative business management an approach or strategy in your business management or not?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer: Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question # 6: What is the role of technology in the progress of your company?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer: Technology has the biggest role in development of our company as we have state of the art &amp; modern machinery set-up and we are continuously adopting latest technological advancements in the field of Textiles.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question # 7: Is your company dealing with smart textiles, if yes, then at what level?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer: No currently we are not dealing with Smart Textiles.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question # 8: Do you think, your company and the industry as well is making any progress with comparison to our neighboring countries such as China and India?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer: Yes our Company &amp; Industry is making very good progress in comparison to India &amp; China, but India &amp; China have bigger production capacity with low fabric quality and cheap prices, we have moderate production capacity, top line fabric quality &amp; getting higher prices from our customers.</td>
</tr>
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<table>
<thead>
<tr>
<th>Question # 9: What is the actual standing of your company with respect to other competitive companies?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer: We are almost neck to neck with our biggest competitor (Nishat Textile Group) and both of us are the biggest Textile Companies in Pakistan.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question # 10: What is the total number of people employed at your company and what is your net sales value?</th>
</tr>
</thead>
</table>
| Answer: Total Employees: 1,350 (2010)  
Net Sales Value: US$ 9.5 Million (2010) |

<table>
<thead>
<tr>
<th>Question # 11: Evaluate the importance of below mentioned issues with respect to your</th>
</tr>
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</table>
company policies and working in a manner of 1= Not Important, 2= Considerable, 3= Medium Importance, 4= Important, 5= Very Important.
Answer:
  a) Strategy (2)
  b) Profit (5)
  c) Growth (4)
  d) Company standing (3)
  e) Policies (1)

Question # 12: Evaluate the importance of below mentioned issues with respect to your company policies and working in a manner of 1= Not Important, 2= Considerable, 3= Medium Importance, 4= Important, 5= Very Important.
Answer:
  f) Management (3)
  g) Technology (4)
  h) Research & Development (2)
  i) Smart Textiles (1)
  j) Production consistency (5)

Aznard 9

Question # 1: What is the focus of your company and the strategy in accordance to the focus and the vision of the company?
Answer: The focus of our company is to fulfill the requirements of our customers up to their max satisfaction level.
Build healthy relationship with existing customers and try to explore new markets.

Question # 2: On what grounds, the strategy of the company has been made?
Answer: The strategy is being made keeping in view all the requirements of international market.

Question # 3: Is there any difference of strategy between your company with the rest of the companies in Pakistan?
Answer: Basic points can be same, but we always try to bring new things and trends in market, we want to be followed not to be the followers.

Question # 4: If there is any difference of strategy, then what is the difference and the differentiating factor?
Answer: we want to be followed not to be the followers.
Question # 5: Is creative business management an approach or strategy in your business management or not?  
Answer: yes it is.

Question # 6: What is the role of technology in the progress of your company?  
Answer: Yes, it is playing a big role, infect it’s the basic requirement for a successful company.

Question # 7: Is your company dealing with smart textiles, if yes, then at what level?  
Answer: no

Question # 8: Do you think, your company and the industry as well is making any progress with comparison to our neighboring countries such as China and India?  
Answer: Competition is very huge and yes, we are trying our level best to keep in competition with these competitors.

Question # 9: What is the actual standing of your company with respect to other competitive companies?  
Answer: We don’t compromise on quality.

Question # 10: What is the total number of people employed at your company and what is your net sales value?  
Answer: we have around 8000 employees.

Question # 11: Evaluate the importance of below mentioned issues with respect to your company policies and working in a manner of 1= Not Important, 2= Considerable, 3= Medium Importance, 4= Important, 5= Very Important.
Answer: 5
   a) Strategy
   b) Profit
   c) Growth
   d) Company standing
   e) Policies

Question # 12: Evaluate the importance of below mentioned issues with respect to your company policies and working in a manner of 1= Not Important, 2= Considerable, 3= Medium Importance, 4= Important, 5= Very Important.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1: What is the focus of your company and the strategy in accordance to the focus and the vision of the company?</td>
<td>The focus of our company is to get more export orders and we are working in all kind of garments with good quality.</td>
</tr>
<tr>
<td>#2: On what grounds, the strategy of the company has been made?</td>
<td>Strategy is based on investment capacity.</td>
</tr>
<tr>
<td>#3: Is there any difference of strategy between your company with the rest of the companies in Pakistan?</td>
<td>My company is ready to get short run orders with more profit margins.</td>
</tr>
<tr>
<td>#4: If there is any difference of strategy, then what is the difference and the differentiating factor?</td>
<td>We have such setup to deal in fashion.</td>
</tr>
<tr>
<td>#5: Is creative business management an approach or strategy in your business management or not?</td>
<td>Little Bit</td>
</tr>
<tr>
<td>#6: What is the role of technology in the progress of your company?</td>
<td>Company is interested to get each new technology which is required.</td>
</tr>
<tr>
<td>#7: Is your company dealing with smart textiles, if yes, then at what level?</td>
<td>No</td>
</tr>
<tr>
<td>#8: Do you think, your company and the industry as well is making any progress with comparison to our neighboring countries such as China and India?</td>
<td></td>
</tr>
</tbody>
</table>
Answer: Yes, company is dealing customers as comparison with neighboring countries and working on time and work study.

Question # 9: What is the actual standing of your company with respect to other competitive companies?
Answer: Medium

Question # 10: What is the total number of people employed at your company and what is your net sales value?
Answer: 2000 employees
400,000 garments/month

Question # 11: Evaluate the importance of below mentioned issues with respect to your company policies and working in a manner of 1= Not Important, 2= Considerable, 3= Medium Importance, 4= Important, 5= Very Important.
Answer:
   a) Strategy 3
   b) Profit 4
   c) Growth 3
   d) Company standing 2
   e) Policies 2

Question # 12: Evaluate the importance of below mentioned issues with respect to your company policies and working in a manner of 1= Not Important, 2= Considerable, 3= Medium Importance, 4= Important, 5= Very Important.
Answer:
   f) Management 2
   g) Technology 4
   h) Research & Development 3
   i) Smart Textiles 1
   j) Production consistency 3

Crescent Group

Question # 1: What is the focus of your company and the strategy in accordance to the focus and the vision of the company?
Answer:
Focus: To maximize sales
<table>
<thead>
<tr>
<th>Question # 2: On what grounds, the strategy of the company has been made?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer: 1) Maximizing Sales and Revenue</td>
</tr>
<tr>
<td>2) Clinching highest Market Share</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question # 3: Is there any difference of strategy between your companies with the rest of the companies in Pakistan?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer: Yes, difference is one of the biggest production capacities with very diversified product range</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question # 4: If there is any difference of strategy, then what is the difference and the differentiating factor?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer: The difference in strategy is continuous research &amp; development and aggressive sales</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question # 5: Is creative business management an approach or strategy in your business management or not?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer: Yes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question # 6: What is the role of technology in the progress of your company?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer: Technology has the biggest role in development of our company as we have state of the art &amp; modern machinery set-up and we are continuously adopting latest technological advancements in the field of Textiles.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question # 7: Is your company dealing with smart textiles, if yes, then at what level?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer: No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question # 8: Do you think, your company and the industry as well is making any progress with comparison to our neighboring countries such as China and India?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Answer: Yes our Company &amp; Industry is making very good progress in comparison to India &amp; China, but India &amp; China have bigger production capacity with low fabric quality and cheap prices, we have moderate production capacity, top line fabric quality &amp; getting higher prices from our customers.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Question # 9: What is the actual standing of your company with respect to other competitive companies?</th>
</tr>
</thead>
</table>
Answer: We are among moderate companies as an individual unit but our group almost par with our biggest competitor (Nishat & Sapphire Group) and both of us are the biggest Textile Companies in Pakistan.

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**Question # 10:** What is the total number of people employed at your company and what is your net sales value?

**Answer:**
Total Employees: 950 (2010)

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**Question # 11:** Evaluate the importance of below mentioned issues with respect to your company policies and working in a manner of 1= Not Important, 2= Considerable, 3= Medium Importance, 4= Important, 5= Very Important.

**Answer:**
- a) Strategy (3)
- b) Profit (5)
- c) Growth (4)
- d) Company standing (4)
- e) Policies (1)

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**Question # 12:** Evaluate the importance of below mentioned issues with respect to your company policies and working in a manner of 1= Not Important, 2= Considerable, 3= Medium Importance, 4= Important, 5= Very Important.

**Answer:**
- f) Management (2)
- g) Technology (4)
- h) Research & Development (2)
- i) Smart Textiles (1)
- j) Production consistency (4)

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**Sadaqat Textiles**

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**Question # 1:** What is the focus of your company and the strategy in accordance to the focus and the vision of the company?

**Answer:** To create value for our customers through continuous improvement, development and innovation.

We aim to achieve this by:
- Utilizing most modern machinery, latest techniques and highly motivated and quality conscious work force.
- Ensuring on time-in full delivers of our quality products.
Question # 2: On what grounds, the strategy of the company has been made?
Answer: We aim to work as a responsible, efficient and well organized team remaining fully conscious of our moral and social responsibilities.

Question # 3: Is there any difference of strategy between your company with the rest of the companies in Pakistan?
Answer: Don’t know.

Question # 4: If there is any difference of strategy, then what is the difference and the differentiating factor?
Answer: no

Question # 5: Is creative business management an approach or strategy in your business management or not?
Answer: yes

Question # 6: What is the role of technology in the progress of your company?
Answer: Technology plays a vital role in development and innovations of product range to meet various customer needs.

Question # 7: Is your company dealing with smart textiles, if yes, then at what level?
Answer: Not at all.

Question # 8: Do you think, your company and the industry as well is making any progress with comparison to our neighboring countries such as China and India?
Answer: Not really.

Question # 9: What is the actual standing of your company with respect to other competitive companies?
Answer: Good.

Question # 10: What is the total number of people employed at your company and what is your net sales value?
Answer: 2500

Question # 11: Evaluate the importance of below mentioned issues with respect to your company policies and working in a manner of 1= Not Important, 2= Considerable, 3= Medium
Importance, 4= Important, 5= Very Important.

Answer:

<table>
<thead>
<tr>
<th>Importance</th>
<th>Issue or Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Strategy</td>
</tr>
<tr>
<td>5</td>
<td>Profit</td>
</tr>
<tr>
<td>4</td>
<td>Growth</td>
</tr>
<tr>
<td>2</td>
<td>Company standing</td>
</tr>
<tr>
<td>1</td>
<td>Policies</td>
</tr>
</tbody>
</table>

Question # 12: Evaluate the importance of below mentioned issues with respect to your company policies and working in a manner of 1= Not Important, 2= Considerable, 3= Medium Importance, 4= Important, 5= Very Important.

Answer:

<table>
<thead>
<tr>
<th>Importance</th>
<th>Issue or Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Management</td>
</tr>
<tr>
<td>4</td>
<td>Technology</td>
</tr>
<tr>
<td>3</td>
<td>Research &amp; Development</td>
</tr>
<tr>
<td>1</td>
<td>Smart Textiles</td>
</tr>
<tr>
<td>2</td>
<td>Production consistency</td>
</tr>
</tbody>
</table>

**Hirra Terry Mills Limited**

**Question # 1**: What is the focus of your company and the strategy in accordance to the focus and the vision of the company?

Answer: The focus of company is to have orders with long runs and strategy is to target USA market as the order quantities for USA market are quite big.

**Question # 2**: On what grounds, the strategy of the company has been made?

Answer: The strategy of the company is made based on weaving and processing capacities. We have state of the art Dornier weaving machines that run at more than 500 rpm giving daily production much more than other weaving machines available in the market. Dyeing plant has Thies dyeing machines which are high production state of the art machines. Our total capacity is 600 tons per month. Since European market usually has shorter runs with too many sizes and colors, the kind of high tech machines we have make it difficult for us to have too many shorter runs order from Europe. This is the main reason of our focus on USA market.

**Question # 3**: Is there any difference of strategy between your company with the rest of the companies in Pakistan?

Answer: Yes, most of the companies in Pakistan like to target European market due to its attractive prices and shorter runs. There is a trade-off between the prices we get from European market and the volumes we get from USA market.
At the end of the day, we feel that targeting USA market is more fruitful for us because the prices are compensated with the volumes hence giving us more leverage for machine utilization.

Question # 4: If there is any difference of strategy, then what is the difference and the differentiating factor?
Answer: The differentiating factors are volumes and prices. Most of the companies have older machines with slow speeds. For this reason, their capacities are not enough, hence making them more feasible for European markets. The small runs of European market compliment the capacities these small units have.

Question # 5: Is creative business management an approach or strategy in your business management or not?
Answer: Yes creative business management is a strategy in our business and we spend a lot of money on new product development.
We also keep on adding new machines in our existing set up that add value to our products range.

Question # 6: What is the role of technology in the progress of your company?
Answer: The role of technology has a very high role in our company. This is a differentiating factor between HIRA TERRY MILLS LIMITED and other companies around.
Our state of the art machines and processes make us more competitive in this market of terry towels which is a commodity product. If we do not have high tech machines, it will be difficult for us to give quality to our products.
Our technology give us a great edge over other competitors in terms of product reproducibility hence making customers placing repeat order with good volumes after initial orders that are usually of small quantities.

Question # 7: Is your company dealing with smart textiles, if yes, then at what level?
Answer: No

Question # 8: Do you think, your company and the industry as well is making any progress with comparison to our neighboring countries such as China and India?
Answer: Our company and other companies are giving tough competition to our neighboring countries on quality and prices but the issues related to high manufacturing costs including utilities is hampering our progress against the neighboring countries.
Some of the countries like Bangladesh are zero duty counties. So its always beneficial for customers abroad to place orders at a country where they don’t have to pay high duties for import of products. This is also a negative factor against Pakistan.
| Question # 9: What is the actual standing of your company with respect to other competitive companies?  
| Answer: We are considered one of the best companies in Pakistan and our customers like to place high quality products with good volumes at our mills. |
| Question # 10: What is the total number of people employed at your company and what is your net sales value?  
| Answer: Total employees are more than 1,000 and total sales expected during 2011 is more than USD 30 Million |
| Question # 11: Evaluate the importance of below mentioned issues with respect to your company policies and working in a manner of 1= Not Important, 2= Considerable, 3= Medium Importance, 4= Important, 5= Very Important.  
| Answer:  
| a) Strategy | 4  
| b) Profit | 3  
| c) Growth | 5  
| d) Company standing | 4  
| e) Policies | 2 |
| Question # 12: Evaluate the importance of below mentioned issues with respect to your company policies and working in a manner of 1= Not Important, 2= Considerable, 3= Medium Importance, 4= Important, 5= Very Important.  
| Answer:  
| f) Management | 4  
| g) Technology | 5  
| h) Research & Development | 4  
| i) Smart Textiles | 1  
| j) Production consistency | 4 |