

# KNOWLEDGE MANAGEMENT IN INDIAN ENTERPRISES



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**KNOWLEDGE MANAGEMENT**  
**IN**  
**INDIAN ENTERPRISES**

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## **PREFACE**

In the current climate of increasing global competition, the value of Knowledge and learning in improving organizational competence cannot be overestimated. Managers are attempting to use Knowledge to sustain organizational performance and to gain market share. Effective Knowledge Management is indeed critical, as SMEs strive to enhance their competency and to gain economic edge. An increasing number of firms are realizing that Knowledge Management can be used to create business value, generate competitive advantage and achieve business goals and to develop greater value from the core competencies of the business.

Knowledge management research is fragmented across a variety of disciplines. Companies attempting to deploy Knowledge Management may be confused by the variety of efforts under way that all in the name of Knowledge Management. Many companies have tried, with mixed success, to leverage Knowledge assets by centralizing Knowledge Management functions or by investing heavily in information technology. Caught up in general fever, many managers may assume that Knowledge Management can improve their companies. This assumption should be validated by using empirical tests. The key question is not whether to manage Knowledge but how to manage it. In the 21st century, as some argue, the main competitive advantage that companies have is connected to the knowledge they hold and how they utilize this knowledge. Effective implementation of KM practices has become a key strategy for improving organizational performance since suitable management and application of knowledge can assist organizations to be more creative, intelligent and better able to adapt to an ever changing business climate.

There is a general consensus in business practices and academia on the fact that SMEs are falling behind large companies in developing KM practices and benefits of KM have not been fully exploited by these firms. This is reflected in a literature gap where little research efforts have been carried out on this topic. Indeed, to date, there is an abundance of literature describing how various large companies are successfully practicing KM, but the reasons why small firms show poor usage of KM are still;

Only a few SME's have been adopting these critical success factors or Knowledge Management Enablers. Indeed, empirical studies have been rarely conducted in this area. In addition, there is a growing need for qualitative analysis of the effects of knowledge management practices of SMEs especially in Indian context. In today's knowledge era, not only there is a need for larger organizations but there is a need also for Small and Medium Enterprises to practice knowledge management process.

The knowledge that is available within the organization is to be managed to improve organization efficiency. Such an environment and culture will deliberately and systematically help to share information and knowledge with each other, which will reduce error, save valuable planning time, and better, individual and organizational performance. Knowledge Creation, Knowledge acquisition, Knowledge storage, Knowledge Sharing and its application in problem solving and decision making processes not only help to deal with environmental issues but also encourage new innovations to be created, shared, learned, enhanced, organized and utilized for the benefit of the organization and to increase its competency.

Knowledge Management (KM) is a critical area for small business managers in today's competitive environment. However, there is a general consensus in relation to the fact that the benefits of KM have not been fully exploited by small firms. Several Researchers have investigated Knowledge Management factors or Knowledge Management Enablers to find out which of them are essential for managing Knowledge effectively. Thus, this research project seeks to evaluate KM success factor or Enablers as a source of sustainable competitive advantage for SMEs in Textile Industry and to explore the impact of these enablers on organizational performance.

An integrative perspective of these Knowledge Management Enablers, Knowledge Creation Process, Organizational Creativity and Organizational Performance was studied in different countries. Since the nature of Knowledge varies depending upon Knowledge Management process, Locations and time, this research is better able to describe complex and dynamic characteristics of Knowledge Management Context in the Indian Textile Scenario.

This project attempts to study the everyday knowledge management practices being carried out in Textile Small and Medium Size Enterprises of Guntur District at the Middle level. A study has been carried out on a sample to test the reliability and validity factors. The questionnaires were administered individually, which used five point Likert scale, the collected data was scored, coded and analyzed on the dimensions of the scale. The data was analyzed using the statistical technique using SPSS 18.0 software which includes Factor Analysis and Multiple regression analysis.

This book is organized into the following chapters: Objectives and Methodology, Textile Industry overview and Literature review, Theoretical Framework, Data Analysis, Findings and Suggestions.

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# Chapter 1

## Objectives and Methodology

### 1.1 Introduction:

Business scenario has undergone a massive change in recent years thus changing the outlook of economies across the world. Last decade has seen accelerated growth in knowledge based industries and knowledge work. It has also witnessed the ever- increasing impact of competition and change. Knowledge has become the most crucial resource and how an organization manages its knowledge resource makes all the strategic difference. In an economy where the only certainty is uncertainty, one core source of lasting competitive advantage is knowledge. Successful companies are those that consistently create new knowledge, disseminate it widely throughout the organization and quickly embody it in new technologies and products. In order to build and sustain their competitive advantage, knowledge has become a critical strategic resource. Need for knowledge can be assessed at organizational as well as industry level. The new management term *knowledge worker* for the first time highlights a number of issues including emergence of knowledge as the most critical resource, economies of knowledge and productivity of knowledge. The most important responsibility of management is productivity of knowledge as it is going to be one determining factor in the competitive position of a nation, an industry or a firm.

An intelligent company responds to the changes occurring in its environment by changing what it does, and how it approaches things, to ensure that it can pursue its purpose and goals. Knowledge Management basically involves acquisition, creation, dissemination, renewal and application of knowledge towards organizational sustenance and survival. Knowledge management touches and improves almost every area of organizational structure namely product development, engineering and Manufacturing, marketing, product delivery, customer relations, sales and distribution. Good knowledge management enables an organization to retain critical expertise and prevent critical knowledge loss resulting from retirement, downsizing, employee departures and changes by building an organizational economy. It is to ensure a vital workforce and promote human capital.

The basic benefits of knowledge management are to improve productivity and gain competitive advantage through embedding knowledge processes into daily work activities. Effective knowledge management also helps in keeping good relationships with clients by increasing customer knowledge, expediting response to customer queries, suggestions, and complaints. It also ensures improved consistency and quality when serving customers. Knowledge components also provide the highest returns. It is no longer possible to make huge profits on doing or moving things or by controlling money.

A knowing organization is effective because it continually evolves with its changing environment, refreshes its knowledge assets and practices vigilant information processing in decision making. Also a knowing organization is well prepared to sustain its growth and development in a dynamic environment. By sensing and understanding its environment the knowing organization is able to prepare for adaptation early.

By marshalling the skills and expertise of its members, the knowing organization is able to engage in continuous learning and innovation. By applying the learned decision rules and routines, the knowing organization is primed to take timely, purposive action. Many researchers consider and emphasize the ability to create and utilize knowledge to be the most important source of a firm's sustainable competitive advantage.

The textile industry is highly dependent on labor both skilled and unskilled. The production process involves technology and competition and also forces the mills to produce products so as to withstand the customer changing demands. Nobody earlier could have conceived that the industry would require top of the line technical skills. Present day textile machinery is fully computerized and needs totally new skills to manage it effectively. So there is a need for Knowledge work.

In textile industry human resource department should appoint the skillful employee at the right, appropriate, correct place where he has to express his capabilities. This can be achieved with top management commitment in training employees and giving employees opportunities to be responsible for the quality of their work. Encouraging employees to work and be committed to organization towards achieving Organizational goals and objectives is one of the most significant challenges for any management team.

Companies recognize that motivated and responsive employees translate themselves to be happy and loyal customers. Organizational commitment of employees is needed by any organization that wants to be dynamic and growth-oriented or to succeed in a fast-changing environment. Organizations can become dynamic and grow only through the efforts and competencies of their human resources. Personnel policies can keep the morale and motivation of employees high, but these efforts are not enough to make the organization dynamic and take it in new directions. Employee capabilities must continuously be acquired, sharpened and used. For this purpose, an enabling organizational commitment of employees is essential. When employees use their Knowledge initiative, take risks, experiment, innovate, and make things happen, the organization may be said to have an enabling culture for the organizational commitment. Knowledge based economy is the new economy with new rules and new ways of doing business.

## **1.2 The Role of Knowledge Management and Textile Industry:**

Hansen et.al, (1999)<sup>i</sup> stated that Value chain in textile and apparel industry begins with raw material extraction or production stage (i.e., harvesting cotton, or developing new synthetic fibers) that supply the second stage of primary manufacturing, The second stage usually produces a standardized output of commodity material (fibers and fabrics) used to fabricate commodity products. Progressing downstream, products from previous stage are used by manufacturers, who apply product development technologies, patents, and proprietary features to further add value. The next stage includes marketers of consumer products, followed by distributors and finally, retailers who sell to the final consumer.

The stage a firm occupies along its industry's supply chain has important implications for its strategy development and, therefore, its ability to compete.

Porter (1985)<sup>ii</sup> cites a number of ways that firms can leverage linkages across their value chains to reduce cost, increase performance and be more effective. These leverage opportunities include: performing the same function in different ways (e.g., specifying close tolerances), improving the cost or performance of indirect activities (such as improved delivery time based on servicing customer needs gained through online data), reducing the need to demonstrate, and explaining or servicing a product in the field by performing these activities within the firm (such as co-design with customers through Internet-based platforms).

Only recently have knowledge management systems as a means of aligning and optimizing value-chain relationships received attention by textile researchers. Further generic business strategies are a widely used typology that identifies potential routes to competitive advantage within an industry. Two such strategies are of particular relevance to the apparel and textile industry: (1) a *cost leadership* strategy, which requires a firm to emphasize those variables that allow it to achieve and maintain low per-unit costs; and (2) a *differentiation* strategy, which is based on creating a unique image or value for a product or service. Textile and apparel industry is most likely to pursue one of the two primary types of differentiation strategies: (1) *market-based differentiation* where an organization seeks to set itself apart from the competition primarily through product positioning, or (2) *innovation-based differentiation* where the organization attempts to differentiate itself through innovative application of technology to meet customer needs.

In the first situation, the firm closely monitors competitors so that it can differentiate its goods or services from those of its rivals. In contrast, innovation-based differentiation is less concerned with positioning against the competition and more with developing entirely new markets. It has great potential for the textile Industry, as it is not based simply on brand differentiation, but rather on creating a shared and dynamic “Knowledge network”, throughout an integrated value chain. This network in turn can enhance the flexibility and Profitability of the value chain, enabling anticipation of changing market dynamics and more effective new product innovation to meet those market changes. The ability to store, captures, and disseminate knowledge within and across organizational boundaries has challenged managers for many years. However, as product life cycles have decreased and environmental complexity and volatility have increased, the need to manage knowledge is intensifying, particularly across the value chain.

SME’s realized that in order to sustain growth in the future, personnel with generic analytical skills and high learning ability were needed. So, these companies decided to recruit such personnel and then train them in specific job skills. Today SMEs are effectively transforming enterprise knowledge into wealth-creating ideas, products and solutions. They are building portfolios of intellectual capital and intangible assets which will enable them to outperform their competitors in the future. The company also used KM to facilitate reuse of those best practices, assisting the company face the challenges of a competitive business environment. This helped the company’s to deliver high quality, better employee productivity, greater market awareness, faster time to market and increased customer satisfaction. In SME’s Employees work with the KM programmer because they see its benefits and realize the value it brings them on a day-day basis. Knowledge work defined at the point of need by the issues, problems or opportunities that arise.

In order to sustain its performance, a successful firm must pursue new market opportunities continuously, albeit by first leveraging its available competencies and build new platforms of competencies to fuel future growth, but doing so by first strengthening the firm's competitive advantage in existing markets.

The two broad types of knowledge: resource conversion and market positioning. Resource conversion knowledge refers to the ability of a firm to use generic resources, which are also available to its competitors and yet create distinctive products and services from these, through product and /process innovation. The ability of a firm to see opportunities in its environment and avoid threats in another form of knowledge.

Today introduced a formal KM system, felt the need for dedicated resources, technology infrastructure, cultural change and leadership commitment to manage knowledge within the organization effectively. The mission of KM efforts at SME's was to "ensure that all organizational learning is leveraged in delivering business advantage to the customer.

Firms view knowledge and knowledge management as part of their strategic orientation. The difficulties of managing knowledge are faced by firms of all sizes. Low- cost strategies may emphasize knowledge that can be used to cut costs, lower prices, and shorten cycle times whereas differentiation strategies may emphasize knowledge that adds value to a product giving it unique characteristics that serve to differentiate it from the competition.

This project examines the process of Key Knowledge management enablers needs for SME's for creation of knowledge both within the firm through organizational memory and across the value chain through knowledge management and compares these practices for small and medium scale enterprises.

### **1.3 Problems and Challenges Facing the Textile Industry:**

#### **1.3.1 Textile Machinery Shortages:**

The textile industry is grappling with the inability of replacing its old and worn out machinery as there is a dearth of domestic machinery manufacturers. The paucity of domestic producers of shuttle less looms and spindles is greatly affecting the industry with the waiting time per order.

#### **1.3.2 Raw Material Shortages:**

While India has adequate raw material for polyester production, it is deficient in cotton. Though India is the second largest producer of cotton in the world next to China, our production figures are not even half of what the world leader China produces. Since 85% of Indian garment exports are linked to cotton, the fluctuations in production and the poor yield per hectare necessitate the need for imports at varying prices.

This creates problems in production planning and achieving cost efficiencies. Further, the industry is heavily dependent on imports for long and extra-long staple varieties from the US and Egypt as they are not grown except in a limited area around Salem in Tamil Nadu.

### **1.3.3 Entry Barriers to Trade:**

Two types of market entry barriers for trade in textiles and clothing (TandC) are faced by developing countries: (i) arbitrary conditions imposed by powerful apparel contractors possessing large distribution channels in the major markets; and (ii) closed networks created by preferential rules of origin under the regional trade agreements.

India is to counter problems of private codes of conduct. Particularly international contractors often control large and powerful distribution channels for textiles and clothing products in major importing countries, and firms in India have practically no bargaining power. Moreover, there is no mechanism to effectively address the problem of private codes of conduct in relevant organizations such as ILO and UNCTAD, or through body of clear-cut trade rules. Apparel retailing in the major importing countries is dominated by large firms which control major distribution channels.

Consequently, they impose tough labor conditions to their business partners to avoid having a damaging publicity in their home countries. For factories in developing countries, it is essential to meet the conditions imposed by their contractors as they control major distribution channels in their home markets. The problem for factories in developing countries is that conditions imposed are often arbitrary, unpredictable and exceed the basic labor rights defined by the ILO.

The challenge for developing countries is how to solve the problem caused by labor conditions imposed by powerful contractors. As noted above, these conditions are outside the scope of the ILO basic labor rights, often arbitrary, selective and unpredictable. They seriously disrupt business and exports of apparel manufacturers in developing countries, yet affected firms do not have appropriate channels to bring their cases. This is the area where UNCTAD should consider how this sort of unfair business practice could be addressed, and assist affected developing countries.

### **1.3.4 Closed Networks:**

The two major markets for textiles and clothing, the EU and the US, are expanding their preferential trade partners concluding trade agreements with them, and increasing textile and clothing are entering these markets with preferential treatment. However, at the same time, preferential trade agreements are creating closed networks between the major markets and their preferred trade partners due to the preferential rules of origin unfairly excluding third country suppliers. The most relevant trade agreements in this respect are the Caribbean Basin Initiative, the Andean Trade Preferences Act, the North America Free Trade Agreement, and the African Growth and Opportunity Act for the US, and the ACP- EU Trade Agreement, Everything but Arms (EBA) Initiative, and the Euro-Mediterranean Association Agreements for the EU.

Finally, the textile industry is facing in-house problems relating to inadequate infrastructure, obsolete machinery, and lack of trained manpower, decentralized and fragmented nature of the industry, besides the inflexible labor laws.

Though a large number of policy measures have been undertaken by the Government in terms of making easy and subsidized credit available for modernization of technology, supporting the industry for cluster development and establishment of integrated textile parks, provision of duty drawbacks on exports, etc., the Indian TandC exports doesn't seem to have converted these benefits to their advantage.

In addition to the challenges faced by the exporting community from the home front, they also face tariff and non-tariff barriers from the major export destination countries of EU and the US. The US market practices peak tariffs and tariff escalations in the textile import from India and other developing countries so as to provide protection to its own industry.

In the Indian case, besides the short term relief measures and stimulus packages, some fundamental policy changes are needed. For the merchandise trade sector, these include continuation of the reduction in customs and excise duty to make our exports and industry competitive, streamlining of existing export promotion schemes, giving special attention to export infrastructure along with rationalization of port service charges based On services rendered by ports in tune with our competing countries, weeding out unnecessary customs duty exemptions, rationalizing the tax structure including specific duties in a calibrated manner taking into account the specific duty levels in our trading partner countries.

The biggest challenge before the industry will be to radically change its mindset. No more can industry continue to survive behind high tariff barriers and /or non-tariff walls like import licensing, etc. In the domestic market, industry must be prepared to meet growing competition from three sources, viz., from imported goods coming into the domestic market at lower and lower import duties; from goods produced in the country for the domestic market by foreign controlled enterprises using their trademarks and latest technology; and lower prices because of an inability to raise prices in the face of low world inflation. In the external market, Indian industry will face two major challenges.

First, competition from other developing countries that have taken to outward orientation much before US, and have thereby enhanced their international competitiveness. Second, from non-tariff barriers in industrial countries in the guise of environmental, health, safety and technical standards. Competition can be expected from the whole spectrum of goods from the lowest quality to the highest quality. The textile SMEs, located in identifiable clusters in India, face several common problems: Lack of technology up gradation and inadequate capacity to source the requisite raw materials.

#### **1.4 Need for KM Variables:**

There is a general consensus in business practices and academia on the fact that SMEs are falling behind large companies in developing KM practices and benefits of KM have not been fully exploited by these firms. This is reflected in a literature gap where little research efforts have been carried out on this topic. Indeed, to date, there is an abundance of literature describing how various large companies are successfully practicing KM, but the reasons why small firms show poor usage of KM are still; only a few SME's have been adopting these critical success factors or Knowledge Management Enablers. Indeed, empirical studies have been rarely conducted in this area.



In addition, there is a growing need for qualitative analysis of the effects of knowledge management practices of SMEs especially in Indian context. In today's knowledge era, not only there is a need for larger organizations but there is a need also for Small and Medium Enterprises to practice knowledge management process. The knowledge that is available within the organization is to be managed to improve organization efficiency. Such an environment and culture will deliberately and systematically help to share information and knowledge with each other, which will reduce error, save valuable planning time, and better, individual and organizational performance. Knowledge Creation, Knowledge acquisition, Knowledge storage, Knowledge Sharing and its application in problem solving and decision making processes not only help to deal with environmental issues but also encourage new innovations to be created, shared, learned, enhanced, organized and utilized for the benefit of the organization and to increase its competency.

The construct of knowledge may be seen as composite construct resulting from interaction and interplay of data, information, rules, procedures, best practices and traits such as attention, motivation, creativity and innovation. From a pragmatic perspective, the dynamic nature of knowledge provides a more realistic construct having human and social interactions towards performance outcomes. Many managers may not know which variables may contribute to improve KM programs success and many may still to find out variables hindering the KM implementation. This study aims to identify and evaluate the enablers affecting knowledge management (KM) implementation in Indian Small and medium manufacturing enterprises. Appropriate handling with these enablers may help to ensure effective KM implementation and a realization of the promised benefits for SMEs.

Factors (or Enablers) affecting KM implementation in SME's are complex in nature and abundant in number. However, a list of enablers of KM implementation has been identified based on a review of the related literature and discussions with experts in the field. Based on the survey's empirical data, the key knowledge management enablers such as organizational culture, people, IT, HRM practices which will influence the knowledge creation process, interlinking with organizational creativity and organizational Performance which have been shown to be the extremely important enablers for KM implementation in Indian textile small and medium scale enterprises.

Knowledge Management (KM) is a critical area for small business managers in today's competitive environment. However, there is a general consensus in relation to the fact that the benefits of KM have not been fully exploited by small firms. Several Researchers have investigated Knowledge Management factors or Knowledge Management Enablers to find out which of them are essential for managing Knowledge effectively. Thus, this research project seeks to evaluate KM success factor or Enablers as a source of sustainable competitive advantage for SMEs in Textile Industry and to explore the impact of these enablers on organizational performance. An integrative perspective of these Knowledge Management Enablers, Knowledge Creation Process, Organizational Creativity and Organizational Performance was studied in different countries. Since the nature of Knowledge varies depending upon Knowledge Management process, Locations and time, this research is better able to describe complex and dynamic characteristics of Knowledge Management Context in the Indian Textile Scenario. A conceptual model has also been presented which has been based upon the results of the statistical analysis of questionnaire-based survey conducted and subsequent discussions on the results.

## **1.5 Research Gap:**

Knowledge has been long cited as a strategic asset and a source of competitive advantage for organizations. However, the creation of knowledge is a complex process that is influenced by several factors beyond the typical practice of knowledge management (KM). This study focuses on Indian companies examining the insights of Knowledge Management. The general purpose of the research is to develop an integrative frame work particularly with respect to Knowledge concepts identified as significant for organizations.

These include Knowledge Management enablers and Knowledge Creation with a focus on the process perspective, as well as their relationship to performance. This study aims to create a potentially generalized model which combines the most widely accepted Knowledge Management enablers and Knowledge Creation process from both a Social and technological perspective, with constructs of transformational leadership and human resource management, which relates all these to organizational performance.

The resulting integrative frame work should address the strategic needs of organizations and provide them with indicators, which should help them to manage their Knowledge effectively. Managers face a dilemma in selecting the most effective Knowledge Management enablers and processes to solve organizational problems. The research findings should provide managers with guidelines as to which of the Knowledge Management enablers and Knowledge Conversion modes they need to focus on as well as aspects of transformational leadership and human resource management in order to optimize their performance.

According to Pan and Scarborough (1998)<sup>iii</sup>, Knowledge management enablers may be structured upon socio-technical theory. Socio-technical theory describes an organization from the social and technical perspectives. However according to Bostrom and Heinen (1977)<sup>iv</sup> these two perspectives are not unique to Management Information Systems (MIS) research.

Lee and Choi (2003)<sup>v</sup> and Mohammad Migdadi (2005)<sup>vi</sup> highlighted the importance of knowledge management enablers and the linking components, such as knowledge creation process, organizational creativity and organizational performance.

Lee and Choi (2003)<sup>vii</sup> developed to a more integrative model highlights organizational culture, organizational structure, people, IT. However, the later model Mohammad Migdadi (2005)<sup>viii</sup> highlights organizational culture, organizational structure, people skills, IT and transformational leadership as social enablers, and information technology as a technical enabler.

However, this research model consists of Organizational culture, People Transformational leadership IT Human resource management. In summary, the empirical research model illustrates the relationships among variables as shown in Figure1.1. The model consists of knowledge management enablers, elements of the knowledge creation process, organizational creativity as an intermediary outcome and, importantly, organizational performance.

## An Integrative view of KM Enablers, Knowledge Creation Process Organizational creativity and Organizational Performance

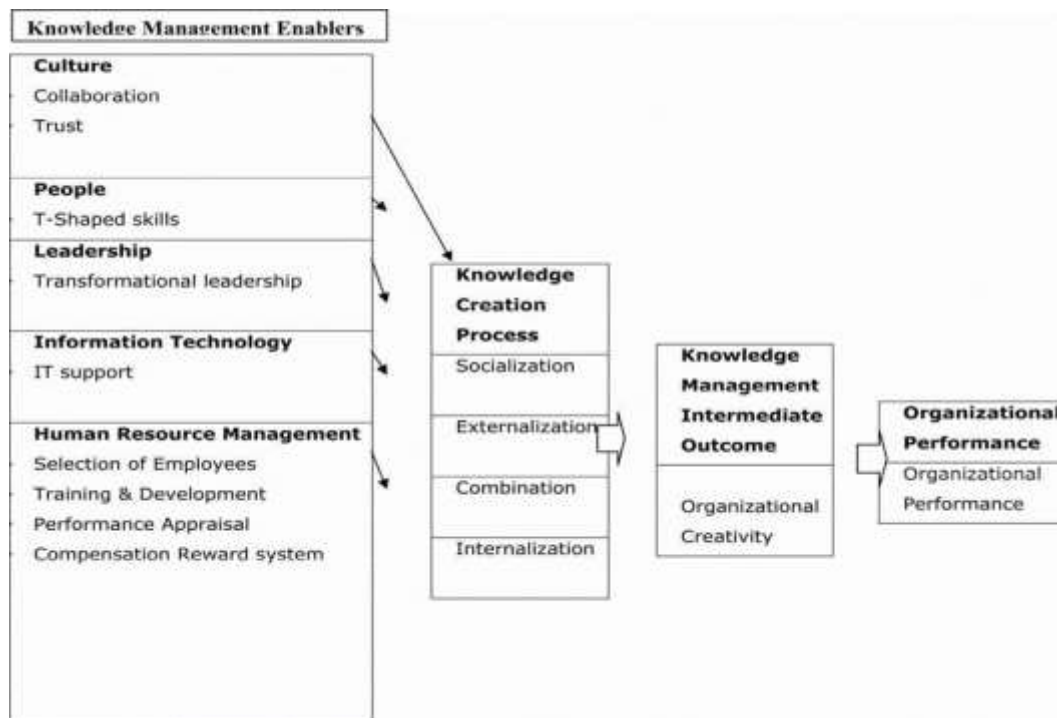


Figure 1.1: Research Model

### 1.6 Role of Independent and Dependent Variables:

In the above research model Fig 1.1, the Knowledge management enablers are independent variables, whereas knowledge creation process variables are dependent variables (Intermediate variable). However, these knowledge creation process variables are independent variables to organizational creativity (Intermediate variable) which is a dependent variable. Finally, Organizational creativity is an independent variable to organizational performance which is a dependent variable.

### 1.7 Objectives of the Study:

This research attempts to find the relationships among Knowledge management components such as Knowledge management enablers, Knowledge Management process, Organizational creativity and Organizational performance in SMEs. The first challenge is to explore the relationships among these factors.

Integrative perspectives of these knowledge variables and the Textile industry specific comparison is necessary. The industry specific comparison may reveal which sector relies more on tacit or explicit knowledge. Exploration of the relationship between Knowledge creation process and department types may be necessary.

More specifically, this research intends to answer the following questions from the process oriented perspective:

1. To study the influence of Knowledge Management Enablers- i.e. Organizational Culture, Information Technology, T-Shaped Skills, Transformational Leadership and HRM on Knowledge Creation Process.
2. To analyze the relationship between Knowledge Creation Process and Organizational Creativity.
3. To study the impact of organizational creativity on organizational performance.
4. To suggest the suitable measures for effective functioning of SME's in Textile Industry.

### **1.8 Hypotheses of Study:**

The hypotheses developed for this study, are to find the significant relationship between two or more Knowledge Management enablers influencing the organizational performance.

It introduces the research model, which explains the Knowledge management enablers, Knowledge Creation process and Organizational creativity.

#### **1.8.1 Hypotheses of Study:**

- H<sub>1</sub>: There is a significant relationship between Knowledge Management Enablers and Knowledge Creation Process.
- Sub-hypothesis One (H<sub>1a</sub>): There is a significant relationship between Organizational culture and Knowledge creation process.
- Sub-hypothesis Two (H<sub>1b</sub>): There is a significant relationship between T-shaped skills and Knowledge Creation process.
- Sub-hypothesis Three (H<sub>1c</sub>): There is a significant relationship between Transformational leadership and Knowledge Creation process.
- Sub-hypothesis Four (H<sub>1d</sub>): There is a significant relationship between Information Technology (IT) and Knowledge Creation process.
- Sub-hypothesis Five (H<sub>1e</sub>): There is a significant relationship between Human Resource Management and Knowledge Creation process.
- H<sub>2</sub>: There is a significant relationship between Knowledge Creation process and Organizational Creativity.
- Sub-Hypothesis One (H<sub>2a</sub>): There is a significant relationship between Socialization and Organizational Creativity.
- Sub-hypothesis Two (H<sub>2b</sub>): There is a significant relationship between Externalization and Organizational Creativity.
- Sub-hypothesis Three (H<sub>2c</sub>): There is a significant relationship between Combination and Organizational Creativity.
- Sub-hypothesis Four (H<sub>2d</sub>): There is a significant relationship between Internalization and Organizational Creativity.
- H<sub>3</sub>: There is a significant between Organizational Creativity and Organizational Performance.

### 1.9 Scope of the Study:

The present study is confined to Textile SMEs in Andhra Pradesh state alone. It has several districts, each having Micro, Small and Medium Enterprises considers research MSME act 2006 base. The scope of study is confined to one district i.e.; Guntur district having 117 Textile SMEs as per the information of the DIC, Guntur.

The enterprises for the study were chosen on the basis of the definition stated under MSME Act (2006) <sup>ix</sup> and the same is adopted as Micro, Small and Medium Industries of both manufacturing and service enterprises. To explore the influence of Knowledge management enablers in organizations, this research project geographically covers the Textiles SMEs in Guntur District.

The study is restricted to the analysis of KM Enablers influencing the Knowledge Creation process only. The study is confined to qualitative aspect of research gap. It also attempts to quantify the research gap.

### 1.10 Definition: MSME:

The importance of the role of SMEs in the Indian economy, in terms of economic growth and providing employment, has been increasingly acknowledged in recent years. Indian government has become increasingly aware of the important of private investment and enterprise, particularly in SMEs, in recent years. Table 1.1 shows the Definition of Micro, Small and Medium Scale enterprises.

**Table 1.1: Definition of MSME in Indian Scenario**

Sector	Micro Enterprise	Small Enterprise	Medium Enterprise
Manufaturing	Investment in Plant and Machinery < Rs 2.5 Million Or < Rs 25 Lakhs	Investment in Plant and Machinery = (Rs. 2.5 Million-50 Million) or (Rs 25 Lakhs – 5 Crore)	Investment in Plant and Machinery = (Rs 50 Million – 100 Million) Or (5crore – 10 crore)
Service	Investment Equipment < Rs 1 Million < 10 Lakhs	Investment Equipment = (Rs Million-20 Million) (10 Lakh – 2 Crore)	Investment in Equipment= (Rs 20 Million- 50 Million) ( 2 Crore- 5 Crore)

**Source:** MSME Act 2006 Ministry of Micro Small and Medium Enterprises, Government of India.

**Figure 1.1: New Definition of MSME (Indian Context)**

<b>Composite Criteria: Investment in Plant and Machinery/equipment and Annual Turnover</b>			
<b>Classification</b>	<b>Micro</b>	<b>Small</b>	<b>Medium</b>
	Investment in Plant	Investment in Plant	Investment in Plant
	and Machinery or	and Machinery or	and Machinery or
	Equipment:	Equipment:	Equipment:
<b>Manufacturing Enterprises and</b>	Not more than Rs.1 crore and Annual	Not more than Rs.10 crore and Annual	Not more than Rs.50 crore and Annual
<b>Enterprises rendering Services</b>	Turnover; not more than Rs. 5 crore	Turnover; not more than Rs. 50 crore	Turnover; not more than Rs. 250 crore

**Source:** <https://msme.gov.in/know-about-msme>: New definition of MSME wed 1<sup>st</sup> July, 2020

### **1.11 Limitations of the Study:**

Due to the size of the problem, the study was restricted to Middle level Managers working in Textile SMEs only. It has become difficult for the researcher to collect the data from various SMEs. Another basic limitation of behavioral sciences is that they would deal with attitudes. These attitudes differ from individual to individual. Even though utmost care has been taken in selecting the sample, the results derived from a study may not be exactly equal to the true value of the population. Hence results of the study are considered to be true, and relationships hold good, only for this study. Perceptions of the respondents are measured through observation, personal interview, questionnaire and schedules. The authoritarian system in India may cause respondents to answer with partially frank acknowledgement of feelings. It became very difficult to meet and elicit opinion of managers due to their busy schedules. Majority of Managers are under the impression that research on management means probing into the internal affairs of the company. With this opinion they hesitated in providing required data. However, managers of different SME's did co-operate. This research project would not have been possible without the help received from them.

### **1.12 Methodology of the Study:**

#### **1.12.1 Questionnaire Development:**

The questionnaire is the research instrument used to obtain the appropriate information from a respondent. The questions posed in the questionnaire confirm to the research objectives and provide information that is useful for data analysis. The Questionnaire constitutes of five parts:

1. Demographic questions to capture participant's personal details
2. Questions related to KM Enablers
3. Questions related to Knowledge Creation Process
4. Questions related to Organizational Creativity
5. Questions related to Organizational Performance

Questionnaire items developed are mainly based on the work of Lee and Choi (2003)<sup>x</sup> and Migdadi (2005)<sup>xi</sup> who, before developing the questionnaire items, conducted interviews to investigate the current status of knowledge management. This investigation included knowledge management practices such as the number of communities of practice, the rate of use of the knowledge management system, and the cost of investment in knowledge management activities. Most of the research constructs have already been validated and used in other studies on knowledge management enablers, organizational culture, IT management, T-shaped Skills, Transformational leadership, Human resource management. The author developed a list of 60 items to measure the different constructs in this study: organizational trust, organizational collaboration, IT support, T-shaped skills, Transformational leadership, Selection of Employees, Training and Development, Performance Appraisal, Compensation and reward system, Socialization, Externalization, Combination, Internalization, Organizational creativity, and Organizational performance.

The aim of this empirical research is to test whether the dimensions proposed in the above-mentioned integrative view support a significant distinction between different kinds of knowledge management enablers. This represents the first step in testing the full framework where managers would be asked to rank a variety of the variables of the knowledge management enablers, knowledge creation variables, organizational creativity variable, and organizational performance variable according to the framework. During the first stage, generic descriptions of the research framework constructs including their operational definitions is introduced, then a set of items was developed to measure them.

An initial version of the questionnaire was constructed by placing each of the following concepts: knowledge management enabler description, knowledge creation processes, organizational creativity, and organizational performance at the top of a page, followed by the set of items. Items featured a five-point Likert scale, with response options ranging from "strongly disagree", to "strongly agree".

The questionnaire was divided into various sections. Seventeen sections presented the questions regarding the variables (independent and dependent) in the framework. The background and demographic information: the middle manager's age, sex, number of years worked in the organization, number of subordinates who directly report to him/her, number of subordinates who indirectly report to him/her, title (job) of the person he/she reports to, annual income, and the highest level of education completed.

### **1.12.2 Collection of Data:**

This study will involve a questionnaire-based survey of middle level managers from Textile SME's, in order to examine empirically the effects of the Human Resource Management constructs, as a knowledge management enabler on the knowledge creation Process,

Organizational creativity and on the organizational performance. In addition to that, and by using the same Methodology, effects of knowledge management enablers included in Lee and Choi's (2003)<sup>xii</sup> and Migdadi (2005)<sup>xiii</sup> model will be examined to find out if they are different from those in their study.

The data has been collected from both sources i.e.; primary and secondary. For collection of data from primary sources, efforts were made to elicit the opinions of almost all key personnel in the organizations, through observations, personal interviews, questionnaires and e-mail. In depth interview technique was used for collecting the primary data.

The data collected by surveys and other empirical designs is of little use unless its reliability and validity can be demonstrated by Flynn (1990)<sup>xiv</sup>. Therefore, the main objective of this pilot study is to demonstrate both the reliability and validity of the research model constructs, i.e.; Knowledge creation processes, organizational creativity and organizational performance.

According to Zikmund (2003)<sup>xv</sup> the Multi-item instruments used to measure a single concept of construct with several attributes are called index measures, or composite measures. However Sevenssen (2001)<sup>xvi</sup>, the Construct consists of a specific number of necessary underlying dimensions that are supposed to reflect a phenomenon or object in a specific empirical context. Reliability is the degree to which measures are free from error and therefore would yield consistent results if they were repeatedly administered to the same people.

According to Cronbach (1951)<sup>xvii</sup>, the most widely accepted measure of a measure's internal consistency is Cronbach's Alpha. Therefore, Cronbach alpha is calculated for each scale in this study. Alpha is the average of the correlation coefficient of each item.

According to Nunally (1978)<sup>xviii</sup>, the minimum generally acceptable Alpha value is 0.7, and it is allowed to be 0.6 if the scale is new. Cronbach's alpha can be increased in either the average correlation or in the number of items

According to Zikmund (2003)<sup>xix</sup>, To achieve construct validity, a researcher must have already determined the meaning of the measure by establishing what basic researchers call convergent validity and discriminant validity.

A measure of a theoretical concept has convergent validity when it is highly correlated with different measures of similar constructs, Migdadi (2005)<sup>xx</sup>. The item-to-total test correlation is used to check the convergent validity for all multi-item constructs Lee and Choi (2003)<sup>xxi</sup>.

### **1.12.3 Statistical Methodology:**

According to Pedhazur and Schmelkin (1991)<sup>xxii</sup>, the Discriminant validity refers to the uniqueness of the constructs. In other words the correlation between two scales designed to measure two distinct constructs should not be so high as to raise doubt that the constructs are measuring theoretically distinct concepts.



Thus, a measure has discriminant validity when it has a low correlation with measures of dissimilar concepts. Discriminant validity can be used to test whether or not knowledge management enablers are related in reality.

While Bagozzi (1980)<sup>xxiii</sup> criteria were originally developed to ascertain the correspondence between theoretical constructs and observational constructs, these criteria

can be used in research design. Both the first and second criteria can guide theory generation and the development of the measures to be used. After empirical testing is undertaken, remaining criteria should be ascertained before the relationships among theoretical constructs using measure constructs are analyzed.

We summarize the criteria in terms of our study in Table 1.2, For questionnaires, a multiple-item method was used. The methodology adopted includes both-descriptive and inferential statistical analysis.

Descriptive analysis is employed for demographic profiling of participants, to summarize the responses of participants and to understand the pattern of responses in the frequency tables.

Inferential analysis is employed to make inferences about the set hypothesis and to draw conclusions at large. Exploratory Factor analysis and Multiple regression analysis was performed to identify the significant factors and the key relationship between them.

**Table 1.2: Bagozzi’s Criteria (Source: Lee and Choi (2003))<sup>xxiv</sup>**

<b>Bagozzi’s Criteria</b>	<b>This Study</b>
Theoretical Meaningfulness of concepts	Integrative view model from various theories
Observational Meaningfulness of concepts	Used previously validated measures with new measures that are tested in pilot study
Internal consistency of operationalization	Used multiple-item constructs and tested with Cronbach’s alpha Coefficient
Convergent validity	Used multiple-item constructs and tested with Total Correlation
Discriminant validity	Used multiple-item constructs and tested with factor analysis
Nomological validity	The results of the study should be consistent with a larger body of theory and contribute to the reference field

Green (1998)<sup>xxv</sup> states that the sample should remain small, but cover all subgroups of the target population. The exact size of the pre-test sample depends on the variety of respondents in the final study. It should be sufficient to satisfy the similarity to target group considerations of the pre-test. The variety of the respondents and the complexity/uniqueness of the questionnaire should also be considered by Tull and Hawkins (1987)<sup>xxvi</sup>, Hunt (1982)<sup>xxvii</sup> highlighted that the sample size is a function of the instrument and the target population.

#### **1.12.4 Sample Selection:**

In view of the problem and scope of the study, a simple random sampling technique is adopted in drawing the sample. Every possible effort was made to include a cross section of the population in the sample.

Assuming the population of Textile SMEs and it is normally distributed if the Z- value is at 95% confidence level then according to Nunnally (1978)<sup>xxviii</sup> the minimum sample size requirement is 384. However, 464 respondents, i.e. :Middle level managers of various 117 Textile SMEs have given their responses. Out of a total of 569 managers in SMEs, 464 responses were found to be usable and there was 81.5% of response rate. Appropriate representation was given to various demographic factors like age, gender, education and turnover of the company.

#### **1.12.5 Demographic Profile of the Respondents:**

The below Table 1.3 indicates that 10.60% of respondents of Manager's Age is less than 25 Years; 36.1% of Manager's age is between 25-40 years; 53.30% of Manager's Age is between 41-55 Years. The results also indicate that the majority of survey respondents are male which covers 62.1% and the rest of the 37.9% female. It also explains to us that the majority of the respondents employed by the SMEs are Male.

The Table 1.3 indicates that 39.40% of Manager's experience is 1-5 years; 33.20% of Manager's age is between 6-10 years; 27.40% of Manager's experience is greater than 10 years. It also indicates that 62.6% of subordinates directly report to the manager is between 1-10; 37.40% of number of subordinate's report to the Manager is between 11-20; This data reflects that Maximum no of subordinates directly report to the manager is between 1-10.

The below Table 1.3 indicates that 73.4% of Manager's working position belongs to Line Manager cadre, 26.6% belongs to Senior Manager; This data reflects that Majority of Manager's working position is Line Manager.

The level of education of the respondents in the Table 1.3 which shows that there is 4.4% of school level education among the respondents.

However, the ITI level of educational respondents is 32.8 %, 36.2% of respondents are of Diploma, 6.1% belong to intermediate, 11.2% belongs to Bachelor's Degree, and 9.3% of respondents belongs to Master's Degree level. This data reflects that the majority of the respondents are generally educated with some skills and knowledge in technical education.

**Table 1.3: Demographic Profile of the Respondents**

Demographic Criteria	Items	Percent	Frequency of Respondents
Manager's Age	Up to 25Years	10.60%	49
	26-40 Years	36.10%	168
	41-55 Years	53.30%	247
Gender	Male	62.1%	288
	Female	37.9%	176
Manager's Experience	1-5 Years	39.40%	183
	6-10 Years	33.20%	154
	>10 Years	27.40%	127
No of Subordinates directly report to	1-10	62.6%	290
	11-20	37.40%	174
Manager Working Position	Line Manager	73.4%	341
	Junior Manager	26.6%	123
Manager's Highest level of Education	S.S.C.	4.4%	20
	ITI	32.8%	152
	Diploma	36.2%	168
	Intermediate	6.1%	28
	Bachelor	11.2%	52
	Degree	9.3%	44
	Master's		
	Degree		

### 1.12.6 Sample Size Determination and Justification:

Based on the work by Cochran (1977)<sup>xxix</sup>, the determination of sample size takes into account the following factors: Whether categorical or continuous variables would play a primary role in data analysis; What alpha level could be used in the formula; In this study, the continuous variables play a main role. All of the research hypotheses are built on continuous variables. Continuous variables have an infinite number of values or attributes that flow along a continuum Neuman (2003)<sup>xxx</sup>

All of this research's variables, knowledge management enablers, knowledge management creation processes, organizational creativity, and organizational performance, are based on the five point Likert scale.

The alpha level used in determining a sample size in most research studies is either 0.05, or 0.10 (Ary et al., 1996). Although, there is a lack of empirical studies in knowledge management, the majority of studies used the alpha level of 0.05, Lee and Choi, (2003)<sup>xxxix</sup> Migdadi (2005)<sup>xxxix</sup> In Cochran's formula, the alpha level selected was incorporated by utilizing the t-value, Bartlett et al., (2001)<sup>xxxix</sup>.

We adopted both interviews and mail. The Interviews were used to investigate the current detailed status of knowledge management. The interviews were held individually or in a small group session from half to one hour.

This investigation included knowledge management practices such as the number of communities of practice, the rate of use of the knowledge management system, and the cost of investment in knowledge management activities.

Although interview data is not analyzed statistically, they were valuable for our interpretation. After interview, a questionnaire-based survey was conducted. According to the individual firm's size, 4 to 5 middle managers were surveyed from each firm.

Middle managers were surveyed because they were played key roles in managing knowledge. Top management clarifies the vision or dream for a company while front-line employees down in the trenches look at reality. The gap between vision and reality is narrowed by middle managers who arbitrate between top management and front-line through creating middle range business and product concepts.

Middle managers are positioned at the intersection of the vertical and horizontal flows of knowledge. Thus, they can synthesize the tacit knowledge of both top managers and front-line employees, make it explicit, and incorporate it into new products and services by Nonaka and Takeuchi (1995). Out of 569 population size at the confidence level of 95% with a margin of error 1.7% the sample size is 464. It is the number of completed responses where the survey receives.

### **1.13 Plan of the Study:**

The entire study is divided into Five chapters. First Chapter provides the Introduction, specifies identifying the research gap for the present study, the research objectives and scope of the present study and indicates the methodology for data collection and the use of data analysis techniques to interpret the valuable insights from the data. Second chapter highlights the overview of textile industry and also covers the literature review of KM Enablers, Knowledge Creation Process, Organizational Creativity and Organizational Performance.

Third Chapter deals with the theoretical review of conceptual frame work related to the present study. Fourth Chapter highlights deals with descriptive analysis of the collected data, testing of research hypotheses and could make readers clearly to understand relationship among data presented in tables and graphs. Chapter five discusses the major findings of the study, Limitations of the study based on data analysis and propose the suggestions

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## Chapter 2

# Textile Industry Overview and Survey of literature

### 2.1 Introduction:

The Indian textile business is among the earliest industries in the nation and also displays a really complicated sectoral dispersal matrix with hand-woven and hand-spun segment at one end of the spectrum and also the capital intensive advanced mill segment in the other end, with the decentralized power looms as well as knitting sectors coming in between.

Even during the structured sphere, "island of excellence", making use of extremely advanced technologies with facilities for Enterprise Resource Planning/System Application. The fiber certain setup of the textile business consists of just about all kinds of textile fibers from healthy fibers such as cotton, jute, wool and silk to synthetic or manmade fibers as polyester, viscose, nylon, acrylic, polypropylene and also the many blends of such fibers as well as filament yarns.

The diverse structure of the industry coupled with its close linkage with our ancient culture and tradition provides it with the unique capacity to produce, with the help of latest technological inputs and design capability, a wide variety, of products suitable to the varying consumer tastes and preferences, both within the country and overseas. It's maybe the sole market in the Indian manufacturing arena that is self-reliant and complete in value chain, i.e., out of the raw material to the highest value added items, i.e., garments or made ups. The Indian textile sector has a tremendous presence in the Indian economic climate as well as in the international textile economy. The contribution of it's to the Indian economic climate is manifested in terminology of its contribution to the manufacturing production, international exchange earnings, along with employment development.

The Indian textile sector has a tremendous presence in the economy in addition to in the international textile economy. The contribution of it's to the Indian economic climate is manifested in terminology of its contribution to the manufacturing production, international exchange earnings as well as employment development. It contributes twenty per cent of manufacturing production, nine per cent of excise collections, eighteen per cent of work in the manufacturing industry, almost twenty per cent of the country's total export earning plus four per cent of the Gross Domestic Product<sup>1</sup>.

The Indian textile sector has a tremendous presence in the Indian economic climate in addition to in the international textile economy. The whirling capability is definitely the second largest after China's. India has got the largest hand weaving segment and much tradition of creating several of the costliest and finest fabrics on the planet. India occupies 2nd place in terminology of spindles (after China) and fourth in regards to cotton use (after China, Russian federation, and USA).

India may be the second largest producer of cotton in the planet, but in terminology of efficiency in terms of hectare we're among probably the lowest. Similarly, the cotton of ours is among the most polluted in the planet. With regard to manmade fibers / yarns, generation of such fibers as well as yarns has spurred throughout the final 5 years to the degree that we're currently the 5<sup>th</sup> largest producer in the planet but in terminology of quality, revolutionary product and cost competitiveness selection, we're not in the picture. It will be sensible to offer extra thrust for consumption of no cotton fibers, especially in value added specialized textiles and blended textiles, Textile items will be the fundamental human requirements and next to food. This particular manufacturing sector in India is participating in a crucial part in the national economy. Indian textile Industry is among the top textile industries on the planet. Although it had been predominantly unorganized business actually a several years back, though the scenario began changing once the financial liberalization of Indian economic climate of 1991. The opening up of economy gave the much needed thrust on the Indian textile sector that has currently effectively become among the biggest on the planet.

India textile business mainly depends upon the textile production of import and export<sup>ii</sup>. Indian Textile business is on the list of main contributing factors to the entire output of GDP. Indian textile industry is additionally the biggest in the nation in terminology of work generation. It not merely creates tasks in the personal industry of its but additionally opens up scopes for another ancillary sectors. India textile business currently generates employment to much more than thirty five million individuals. It employs 3.5 crore individuals indirectly or directly and it is the next highest work provider in the nation. It's the possibility to correct employment in the countryside areas.

Three major attributes are believed to be for being successful in this textile sector. They're, Market Demand, Required Economics and Infrastructure. Along with the above mentioned, the textile market offers a fantastic chance both externally and internally. Inner guidance is offered with escalating per capita use or accessibility of textiles that is compounded by a population size of one billion. External demands are produced by removing quota process in global trade. Besides financial guidance probably provided, a good deal is accomplished by providing better farming cultivation that has improved the yield within the last 10 years. More suitable seeds are furnished in majority segments, which happen to have urged the farmers. The federal government is additionally encouraging to import technology that had been hard in the recent past<sup>iii</sup>.

## **2.2 History of Textile Industry:**

Development in World Textile Industry began in Britain as the weaving as well as spinning models were developed in that region. The Textile business story of the motion from handcraft generation of cloth in each and every nation, to the industrial revolution of Britain, driven by wool and cotton yarn as well as cloth facilities, which in turn distribute to Europe, America, additional nations to Japan. China, Hong Kong, India, and Japan became top producers due to the budget labor supply of theirs, which is a crucial factor for the market. Excessive production of wool, silk and cotton over the planet has boosted the industry recently. Although the market was begun with UK, still in 19th century, the textile generation transferred to North America along with Europe following mechanization procedure in those places.



From time to time Japan, India and China took part in industrializing their economies and concentrated much more in that field. The discoveries of different synthetic fibers as nylon developed a bigger market for textile merchandise and steadily resulted in the creation of new and improved energy sources of healthy fiber. The development of transportation as well as communication facilities facilitated path of transaction of localized skills and textile art among various countries<sup>iv</sup>.

The use of cotton textiles came to the West via the Middle East during the Middle Ages, when Muslims took back cotton cultivation from India. The first fabric of Europe to incorporate cotton fibers was fusion, a mix of linen and cotton, utilized to create bedding and garments. Need for Indian cotton textiles, particularly the hundred per cent cotton cloth referred to as calico, improved in the 16th century. European textile manufacturers attempted to capitalize in on this pattern by making substitutions and getting the Indian textiles banned. In a more globalized environment, the industry has faced high competition as well as draining of opportunities.

### **2.3 Development of Textile Industry in India:**

India has usually been the cotton textile producing nation. Cotton was developed, spun and cloth was woven in the country of ours even greatly earlier compared to some other places began producing it. Indian textiles were known for the exquisite beauty of theirs and fineness. It'd become the sign of aristocracy, artistry as well as gracefulness in the excessive society of Europe. It hit the zenith of glory before the dawn of manufacturing revolution of the west. Because of British Supremacy over Impact and India of manufacturing technology and research, unsystematic mindset of the Government, insufficient serious competition and capital coming from the international nations, the Indian textile industry is confronting challenges that are numerous, to that there's should discover out strategies. The contemporary textile sector had taken birth in India in early nineteenth century if the very first textile mill in the nation was established at Fort Gloster approach Calcutta in 1818. The cotton textile industry, nonetheless, made the true beginning of it's of Bombay, in 1850s. The very first cotton textile mill of Bombay was started in 1854 by a Parsi satin merchant and then involved in internal and overseas trade. Certainly, the great bulk of the first mills had been the handiwork of Parsi merchants interested in yarn as well as cloth swap from home and African and Chinese market segments. Mahatma Gandhi found the strength of Charkha and utilized it to spin the fantasy of Swaraj / Independence from the British Yoke. Khadi being spun on Charkha happens to be connected with our history as well as historical past since time immemorial.

In the context of improving competition, a business can't sustain itself solely on local industry demand or even solely on the exports. One needs to check out the worldwide markets in total. This particular compulsion to access and also fight in overseas markets is possibly among the saving graces for the market. Obviously the capability as well as need of meeting worldwide competition head on, has pushed the market to update marketing skills, cost structure, product quality, and its technology. Another noticeable modification pertains to the scale of operations. Earlier textile mills were usually moderately big sized as well as grew to be a non-constraining element together with the arrival of strength loom sphere, which enabled minor weavers to create and promote the own fabrics of theirs in

immediate competition with mills that are large. An additional shift in the market is regarding entrepreneurship. Technocrats have been equipped to have size that is small spinning, processing and weaving mills. All of this was previously the domain, exclusively of big companies. The textile business being labour comprehensive, is gradually migrating from excessive price nations, like the United States, Australia, Japan, Europe, Korea as well as Taiwan<sup>v</sup>. All of these nations had been at one time top textile companies. However with the high labour expense, capacities in these nations are now being diverted everywhere else. This's happening even as the evolved economies make huge investments in greater machinery as well as automatism. It's primarily concentrating into production of cotton yarn with increased counts as well as value additions catering to the high quality yarn industry. At exactly the same period, industry experts found that there was several strategic issues of present-day times like an increasing rates of change in all elements of business, increasing competition, globalization of business, technological change, transforming work culture, resource constraints transition from industrial to information society, unstable sector because of financial problems, increasing needs by company stakeholders, along with an intricate mental setting.

The Indian textile industry, up until the financial liberalization of Indian economy, was predominantly an unorganized business. The financial liberalization of Indian economy during the early 1990s led to stupendous development of this particular Industry. Currently Textile Industry is considered the most visible market of India since it supplies cloth on the population. Additionally, it helps the survival of various other little scale industries. Textile business indicates the major development of it's in the article of quota routine underneath the World Trade Organization agreement. The intensive worldwide competition of textiles has activated brand new investments as well as cost cutting methods which have considerably improved the effectiveness of transforming cotton fiber into yarn. Constant improvement for production, waste reduction as well as productivity would instantly lead to achievement of the enterprise.

Indian textile business is among the most and oldest firmly established industries. Apart from offering one of several fundamental comforts of daily life, the main presence of it's of the economy is manifested in conditions of its considerable contribution to manufacturing result, employment development as well as export earnings. As a consequence the expansion as well as advancement of this particular market has a tremendous bearing on the general advancement of Indian economy. The next largest exporter and producer of garments and textiles in the planet, Indian Textile Industry is additionally the second biggest employer following agriculture producing work to more than forty five million Indian individuals immediately and more than sixty million folks indirectly. It contributes four percent to the countryside GDP<sup>vi</sup>.

Today textile market of India includes Khadi, Woolen, Silk conventional handloom segment with primitive know-how; power loom segment that is highly enhanced type of the handloom segment as well as the composite mill segment with the innovative technology of its. Among all of the three, the handloom market is very scattered and distribute all over the nation and it is seen even in remote countryside. Power loom market is decentralized plus spread in as well as near a number of determined centers of handloom sector. The mill sector is nicely organized as well as integrated with spinning, processing and weaving under the very same roof.

The sections of textile business produce cloth of various type like cotton, combined, hundred percent non-cotton, Khadi, Silk as well as wool. All of this implies the textile industry is turning to merchandise diversification and would like to grow its production base.

## **2.4 Composition of India's Textile Industry:**

The textile sector in India is among the largest in the world<sup>vii</sup>. The textile industry nowadays is split into 3 segments:

- a. Cotton Textiles
- b. Synthetic Textiles
- c. Others as Wool, Silk, Jute etc.,

All sections have the own location of theirs but perhaps today satin textiles consistently take over with significant percentage of share. The framework of cotton textile business is extremely complicated with co-existence of earliest technologies of hand spinning and hand weaving with probably the most advanced automated spindles and also loom.

The framework of the textile business is very complicated together with the contemporary, advanced and also hugely mechanized mill segment on one hand and hand spinning and hand weaving (handloom market) on the other person.

In between falls the decentralized tiny scale power loom sector. Unlike other major textile-producing nations, India's textile sector is comprised largely of small scale, finishing, weaving, nonintegrated spinning, along with apparel making enterprises. This distinctive business system is largely a history of federal policies which have encouraged labor intensive, small-scale operations and discriminated against bigger scale firms.

### **a. Composite Mills:**

Fairly large scale mills which integrate spinning, weaving and occasionally fabric finishing are routine in some other main textile producing places. In India, nonetheless, these kinds of mills now make up around just three per cent of output in the textile industry. Approximately 196 composite mills are operating in India, many run by the public sector and also numerous deemed financially ill<sup>viii</sup>.

### **b. Spinning Mills:**

Spinning is the procedure of transforming cotton or manmade fiber into yarn to be utilized for weaving as well as knitting. These mills are chiefly situated in North India. Spinning sector is technology comprehensive and efficiency is impacted by the quality of cotton as well as the washing procedure pre-owned during ginning.

Primarily due to deregulation, starting in the mid-1980s, spinning is considered the most consolidated also commercially effective segment of India's textile business<sup>ix</sup>.

### **c. Knitting and weaving Mills:**

The weaving and knits market is in the center of the market. 3 distinct technologies are utilized in the sector: handlooms, power looms as well as knitting devices. Knitting as well as weaving converts cotton, manmade, or maybe combined yarns into woven or perhaps knitted fabrics. India's knitting and weaving sector remains extremely fragmented, small scale, and labor-intensive. Power looms are small firms, with an average loom capability of 4 to 5 owned by impartial business owners or even weavers. Contemporary shuttle less looms account for under 1 per cent of loom capacity.

### **d. Fabric Finishing Units:**

Fabric finishing (also called processing), this includes dyeing, printing, along with other cloth planning before the creation of clothes, is dominated by a lot of independent, small scale enterprises. The Spinning Industry in India is set to get to the global market along with other garments also just like the cotton textiles with its consistency as well as passion in work. It's already arrived at an extraordinary state of India by beating the obstacles which triggered a problem after in the past couple of years and also today he is on the way of its to blanket a broader area in the spinning sector<sup>x</sup>.

The majority of the textile mills in India aren't at all highly updated. Several of the main issues related to these mills include poor productivity, increased cost feedback, poor working capital, and stagnation in demand. Several of the main elements to blame for the development of textile Mills market are: An enormous need of Indian textiles and apparels in the global market; lower custom responsibilities on imported textile machinery; much less small federal restrictions on imported goods. Major trading partners concerning import of textile machineries are U.S., U.K, Switzerland and Germany. India ranks next in the global textile market as well as accounts for a significant portion to the complete Indian exports. For the sustenance of the development and also in order to keep the competence in the international market, the textile mills in India need being modernized.

## **2.5 Classification of Indian Textile Industry:**

Indian Textile Industry may basically be classified into two sections, i.e.; unorganized and organized<sup>xi</sup>.

- **Unorganized Sector:** Unorganized field is definitely the dominating part in this particular market that primarily uses the standard methods (woven or even spun yarn) in cloth generation and therefore is labor intensive in nature. The decentralized nature is a crucial aspect of the unorganized textile sector.
- **Organized Sector:** The majority of the Indian Textile business is extremely organized with enormous importance on capital intensive manufacturing process. This particular field is indicated by advanced mills just where highly complicated machineries are used for mass production of textile products.
- **Cotton/Manmade Fiber Textile Mill Industry:** It employs almost one million employees. A variety of subsidiary industries which includes manufacturing machinery, axillaries, stores, accessories, dyes as well as substances are dependent on this industry.

In the entire Indian textile industry, this field has come as the biggest producer of textile products.

Table 2.1 reveals the entire amount of mills in this particular setor 1957 in number. The fitted capability of all these mills accumulates to 43.3 illion(Non SSI Segment) spindles and 0.523 thousand rotors and 52,000 looms.

**Table 2.1: Growth of Indian Textile Mill Industry**

<b>GROWTH OF COTTON / MAN-MADE FIBRE TEXTILE MILLS (NON-SSI)</b>						
<b>MARCH END</b>	<b>NUMBER OF MILLS</b>			<b>SPINDLES INSTALLED (million)</b>	<b>ROTORS INSTALLED (thousand )</b>	<b>LOOMS INSTALLED (thousand)</b>
	<b>Spinning</b>	<b>Composite</b>	<b>Total</b>			
1951	107	276	383	11.25	--	196
1961	196	285	481	13.83	--	199
1971	379	291	670	17.98	--	206
1981	415	278	693	21.23	--	208
1982	442	281	723	21.93	--	210
1983	561	280	841	22.91	--	210
1984	639	281	920	24.28	--	210
1985	674	281	955	25.57	--	210
1986	702	282	984	26.02	--	208
1987	744	283	1027	26.12	--	208
1988	752	283	1035	26.25	--	199
1989	769	282	1051	26.48	40	184
1990	770	281	1051	26.59	56	181
1991	777	285	1062	26.67	67	178
1995	1148	268	1416	30.7	186	139
1996	1294	275	1569	31.75	226	132
1997	1438	281	1719	33.15	276	124
1998	1504	278	1782	33.88	313	124
1999	1543	281	1824	34.72	383	123
2000	1565	285	1850	35.1	392	123

GROWTH OF COTTON / MAN-MADE FIBRE TEXTILE MILLS (NON-SSI)						
MARCH END	NUMBER OF MILLS			SPINDLES	ROTORS INSTALLED	LOOMS INSTALLED
2001	1565	281	1846	35.53	394	123
2002	1579	281	1860	35.75	409	123
2003	1599	276	1875	36.1	379	119
2004	1564	223	1787	34.02	383	88
2005	1566	223	1789	34.24	385	86
2006	1570	210	1780	34.14	395	73
2007	1608	200	1808	35.61	448	69
2008	1597	176	1773	35.01	461	56
2009	1653	177	1830	37.03	485	57
2010	1673	180	1853	37.68	494	57
2011	1757	183	1940	42.69	518	52
2012	1761	196	1957	43.43	523	52

**Source:** Confederation of Indian textile industries statistics 2014

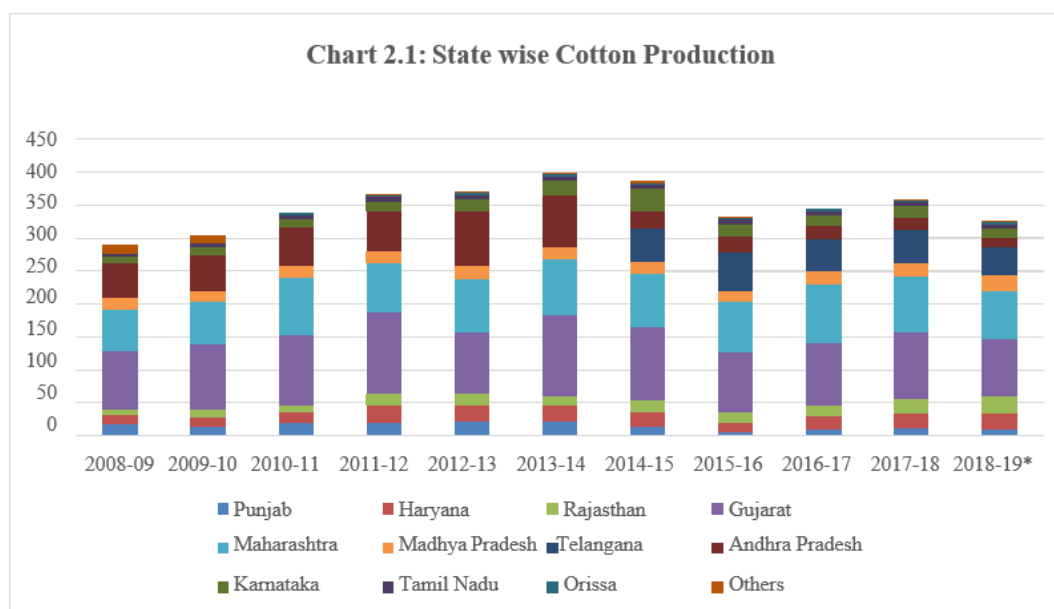
- **Cotton Yarn producing industry:** The generation of this particular market style is seriously influenced by annual generation of cotton which once again is dependent on the verities of nature. Hence the speed of production in this field shows fluctuating trend.
- **Completely non cotton blended yarn producing industry:** This business style is a regular performer where the rate of its production has grown at a regular speed. Organized segment in Textile Industry is passing by way of a phase of stagnation and also the primary reason for its transformation in the structural set up of the market. It's been discovered the weaving industry is delinked from the whirling segment that has resulted in the rise of power looms of decentralized nature.

**Table 2.2: State-wise Cotton Arrivals**

(Quantity in lakh bales of 170 kgs each, 2018-19\*-limited information)- Source: Ministry of Textiles, Government of India

States	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19*
Punjab	17.50	13.00	18.50	20.00	21.00	21.00	13.00	6.25	9.00	10.95	10.03
Haryana	14.00	15.25	17.00	26.00	26.00	24.00	23.00	14.50	20.50	22.50	23.00
Rajasthan	7.50	12.00	10.10	18.00	17.00	14.00	17.00	15.00	16.50	22.00	26.65
Gujarat	90.00	98.00	106.20	122.00	93.00	124.00	112.00	90.00	95.00	100.34	86.74

States	2008-09	2009-10	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19*
Maharashtra	62.00	65.75	87.75	76.00	81.00	84.00	80.00	76.00	88.50	85.00	73.59
Madhya Pradesh	18.00	15.25	17.70	18.00	19.00	19.00	19.00	18.00	20.50	20.50	23.70
Telangana							50.50	58.00	48.00	51.07	42.50
Andhra Pradesh	53.00	54.50	59.50	60.00	84.00	78.00	26.50	23.75	19.00	18.59	13.21
Karnataka	9.00	12.25	11.10	15.00	17.00	23.00	34.00	19.50	18.00	18.00	15.00
Tamil Nadu	5.00	5.00	7.20	6.50	6.00	5.00	6.00	6.00	5.00	4.60	4.83
Orissa		1.00	2.05	3.50	4.00	4.00	3.00	3.00	3.00	3.50	4.05
Others	14.00	13.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	1.00	2.00
<b>Total</b>	<b>290.00</b>	<b>305.00</b>	<b>339.10</b>	<b>367.00</b>	<b>370.00</b>	<b>398.00</b>	<b>386.00</b>	<b>332.00</b>	<b>345.00</b>	<b>358.05</b>	<b>325.30</b>



- **Manmade Fiber/Filament Yarn Industry:** The manmade fiber and yarn industry comprises fiber or filament yarn manufacturing devices of no cellulosic and cellulosic origin. The cellulosic fibre /yarn business is under the administrative command of the Ministry of Textiles while non-cellulosic business is under the control of Ministry of Fertilizers and chemicals (Department of Petro and chemicals).
- **Woolen Textile business:** India may be the seventh largest producer of wool on the planet is becoming the seventh largest producer of wool. This business style is known by:
  - Its export orientation,
  - Production base situated in the countryside areas
  - Presence of organized and also non-organized sector

**Jute textile sector:** The Jute Industry occupies a crucial site in the national economy. It's on the list of main industries in the eastern region especially in West Bengal and Andhra Pradesh states. Jute, the golden fibre, fulfills all of the requirements for safe presentation of view of becoming an all-natural renewable, eco-friendly and biodegradable item. Globally,

India is the biggest producer and second largest exporter of this field and jute products supports the livelihood of approximately forty lakh farm families, and offers indirect and direct work to four lakh employees. You will find seventy seven jute mills in the nation<sup>xii</sup>.

### **Silk and also Sericulture business:**

The breeding and rearing of consequent generation and silk worms of raw silk from them is widely known as Sericulture. This industry is among the most intensive cottage industries in outlying India. Over 50000 villages apply this mechanism of silk generation. Probably the greatest aspect of it's the labor-intensiveness. The silk export products of India incorporate yarn made from organic silk, carpets made of silk, misuse as well as fabric of silk. The Specialty of Silk Industry may be summarized as follows:

- a. Investments needed in this industry are small.
- b. The earnings associated with the purchase of silk items are rather high
- c. Remuneration of the harvest stays lasting all through the entire year.
- d. The approximate amount of people employed in this market (indirectly or directly) would go to 6 million.

### **Handloom Industry:**

Handloom business is positioned in the next place in terminology of provision of livelihood and will come just after farming offering work to sixty five lakh employees<sup>xiii</sup>. This particular field, nonetheless, is beset with manifold issues like the following:

- a. Technology used in this particular industry is backdated within nature,
- b. System of creation isn't organized,
- c. Yield rate of industry that is such is drastically low,
- d. Availability of working capital because of this market is very low,
- e. The marketing part associated with the Handloom business is just about nil,
- f. Innovation in the area of development of final product is drastically very low and therefore the amount of total goods is restricted to a number of.

## **2.6 SWOT Analysis of Textile Industry Strengths are as Follows:**

- **Abundant raw content supply:** India has a huge source of cotton also it's among India's critical price benefits over the formidable competitor of its, China. Cotton output problems in nation were resolved by using of crossbreed seeds (Bt Cotton). This proximity to cotton offers Indian textile manufacturers with an enormous competitive advantage over the various other rivals of it's as Bangladesh, Sri Lanka and Pakistan.
- **Inexpensive Labour:** Since apparel production is extremely labour intensive, inexpensive, labour generates a significant competitive advantage. Labour price is among probably the lowest in India. The Indian labour is actually cheaper compared to China. Nevertheless, the general efficiency associated with a Chinese laborer is substantially greater compared to the Indian counterpart of this, making the complete work cost per unit of completed product at levels that are the same.



- **Integration solution provider:** An extra advantage possessed by India would be that the nation has a strong presence throughout the whole textiles value chain. Consequently, India has amongst probably the largest capacities for spinning, knitting, weaving, garmenting and processing. This provides the nation with huge advantage over others as Bangladesh as well as Sri Lanka.
- **Raising International and domestic market:** India has radiant home-based market with lower per capita use of textiles indicating higher growth potential. Domestic market is very vulnerable to fashion fads and this also has led to the development of a rather responsive garment industry.

**a. Domestic Demand Drivers includes:**

1. Over sixty per cent of Clothing and Textile production for domestic market,
2. Buoyant household economy,
3. Helpful market profile as well as increased working female population,
4. Organized retailing a driver for increased usage.

**b. Overseas Demand Drivers include:**

1. Dismantling of quotas,
2. Increase in locating of textiles by evolved marketplaces from developing countries,
3. Apparel spending remains considerable in life like products category in the evolved planet.

**Weaknesses:** The business is suffering from following weaknesses:

- **Fragmented Industry:** In a fabric significant segment of the market it is in the power loom and handloom sectors. This particular fragmentation results in reduced ability to increase as well as come through as world class players. Additionally worldwide buyers choose to source their whole requirements to 2 to 3 vendors as well as Indian garments think it is hard to satisfy the capability requirements.
- **Historical regulations** however relaxed still be an impediment to worldwide competitiveness. The business is still influenced by a few historical regulations e.g. absence of a practical exit alternative for business players. In numerous instances most devices have nevertheless not taken full advantage of federal initiatives as TMC and TUF Schemes<sup>xiv</sup>.

Lower price competitiveness has hampered capacity to contend with lower cost worldwide players. Labour power in India has a lot lower efficiency as than the competing nations as China as well as Sri Lanka. The Indian industry also lacks adequate economies of scale and is therefore unable to compete with competitors like China. In our country, the other expenses like indirect taxes, strength and interest rates are fairly high. Technology obsolescence has led to the need for substantial technology investments to obtain world class quality. Huge part of the processing capability is obsolete. While state of the art incorporated textile mills are present, vast majority of the capability is presently with the power loom sector. This has additionally resulted in value addition that is very low in the industry.

- **Opportunities for Indian textile business Growth:** There's opportunity that is great for growth to record the domestic and also international market.

Research as well as brand new product development and development must have extra target in Indian businesses in an effort to progress to the value chain and get a greater worldwide market share. The areas of concentration include more recent specialized fabric, quicker turnaround time for design samples, purchasing style samples as well as sampling laboratories. Far more value ought to be provided to increased usage of CAD to acquire developing capability in the businesses. Additionally we have to commit a lot more in pattern forecasting to enable development of the market in the nation.

- **Threats:** Competition that is intense in the domestic market is a significant threat which might lead to competition offering low costs and much better quality to the consumer; in addition to the business is prone to experience competition from cheaper imports. This is apt to influence the domestic industry and could lead to a lot more consolidation<sup>xv</sup>.
- **Social and ecological awareness** is apt to lead to enhanced pressure on the market to follow environmental laws and international labour e.g. evolved markets have seen considerable developments in a heightened consumer consciousness on issues like use of polluting dyes, child labour and unhealthy working conditions. Standards are implemented thoroughly in the market and this also has led to increased strain on the businesses to restrict sourcing from countries/companies recognized to have such methods. The Indian industry has to get ready for the fallout of such problems by boosting its working practices.
- **Regional alliances** will continue to have significant impact as regional trade blocs play a significant role in global garments industry with countries enjoying concessional tariffs by virtue of being members of such blocs/ alliances. It may be realized the future prospects for the Indian textile sector are brilliant and yes it is going to continue to develop to become the next greatest beneficiary following China<sup>xvi</sup>. Where China is acknowledged for the bulk supplies of its, India will have a benefit where creativity as well as innovation are concerned. When measures that are necessary are taken very well inside of time this chance might be likely the next Big Wave for Indian Economy. Thus numerous stakeholders inside the textile business must work to creating a competitive advantage and also projecting it with the worldwide market<sup>xvii</sup>.

## **2.7 Textiles Exports and Imports:**

The study is restricted to the evaluation of general overseas industry of the nation, with specific reference to clothing and textiles (TandC) business, and cotton textiles and clothing particularly, to enhance ideas on tactics being pursued by the market in the global competitive setting.

The analysis is influenced by secondary energy sources of information offered from different publications in the national level brought out by the interested organizations, and consultations with export promotion councils, and manufacturing devices and other organizations in the cotton textiles trade.

**Table 2.3: Shares of exports of India's textile items destinations from India**

Year	China	UAE	USA	SAARC	EU
2004-05	12.30231	11.24239	34.58323	5.014765	47.92938
2005-06	4.079728	7.483574	35.47205	5.335322	47.62933
2006-07	5.694544	7.607959	33.87857	5.832011	46.98692
2007-08	6.686238	8.429922	29.04696	9.908212	45.62867
2008-09	2.870842	10.64374	28.30342	7.632452	50.54955
2009-10	8.057763	10.13262	26.56983	10.13286	45.10692
2010-11	10.92338	9.517467	25.86615	12.20107	41.49193
2011-12	18.32297	9.076582	24.58235	8.609384	39.40872
2012-13	15.43821	9.393416	26.2993	12.53921	36.32986

**Source:** Annual Report 2014-15, Ministry of Textiles, Government of India

**Chart 2.2: Shares of exports of India's textile items destinations from India**

**Source:** Annual Report 2014-15, Ministry of Textiles, Government of India

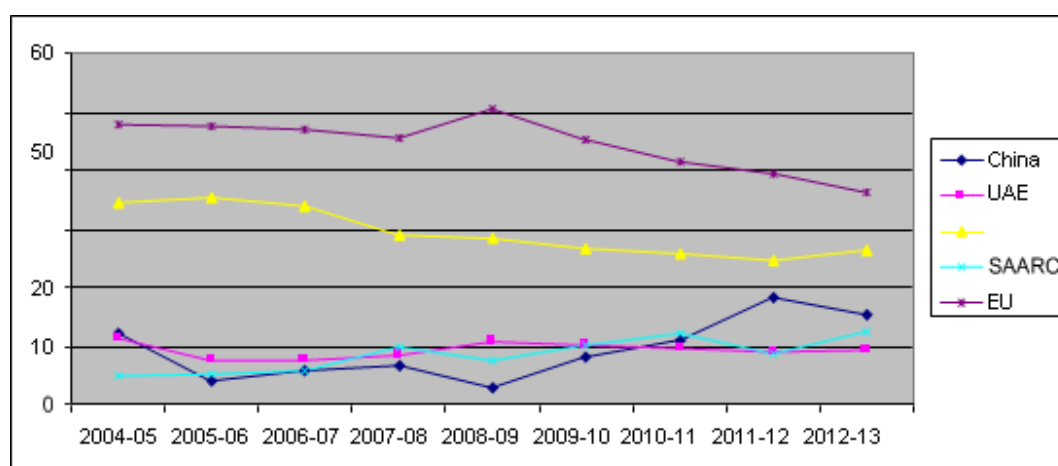


Table 2.3 represents the share of Exports of textile items from India which highlights China's share (12.3%) during the year 2004-05; however during the year 2012- 13 its share is 15.43%. However, for USA for the year 2004-05, India's share of the exports of textile items is 34.58%.

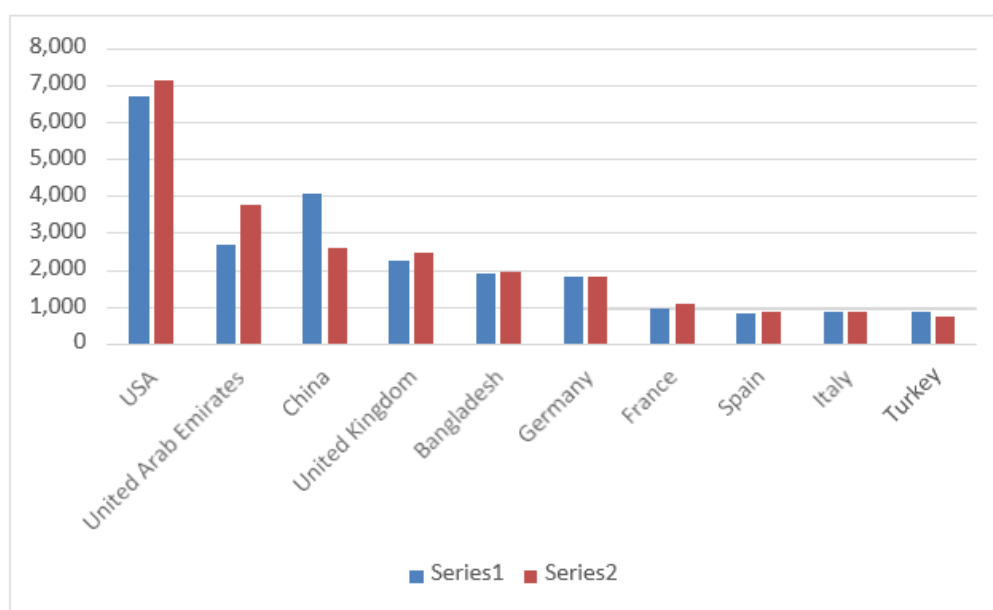
However, for USA for the year 2012-13 its share has declined to 26.2%. For European Union also initially during the year 2004-05 the market share was 47.92% , but during the year 2012-13 its share has declined to 36.3%, which shows decline. Similarly for the countries like UAE, SAARC, USA, European Union the % of export of textile items from India for the year 2002-03 to 2012-13 seems to be declining. Only for the country China the % of export of textile items from India 2002-03 to 2012-13 is increasing.

**Table 2.4: India’s top Ten Export Markets of Textile and Apparel products**

Sr. No.	Countries	Export 2013-14 (US\$ Mn)	% Share	Export 2014-15 (US\$ Mn)	% Share	Y-o-Y Growth
1	USA	6,704	29%	7,154	31%	7%
2	United Arab Emirates	2,676	12%	3,773	16%	41%
3	China	4,071	18%	2,593	11%	-36%
4	United Kingdom	2,268	10%	2,483	11%	9%
5	Bangladesh	1,926	8%	1,973	8%	2%
6	Germany	1,821	8%	1,827	8%	0%
7	France	974	4%	1,102	5%	13%
8	Spain	828	4%	907	4%	10%
9	Italy	871	4%	862	4%	-1%
10	Turkey	869	4%	737	3%	-15%
	<b>Sub Total</b>	<b>23,008</b>	<b>56%</b>	<b>23,412</b>	<b>55%</b>	<b>2%</b>
	<b>Total Textile and Apparel export</b>	<b>41,359</b>		<b>42,192</b>		<b>2%</b>

**Source:** DGCIandS, Ministry of Textiles, Government of India

**Chart:2.3 – India’s Top Ten Export Markets of Textiles and Apparels**



Series 1 : 2013-14 Series 2: 2014-15

From the Table 2.4 represents India's Top Ten Textile Exports which highlights USA exports of textiles and Apparels are increased during 2014-15 as compared with 2013-14. Similarly, United Arab Emirates has seen the highest percentage increase in textiles and apparels ie;41% as compared with previous year. However, as compared with 2014-15 with 2013-14 China's exports of textiles and apparel markets is decreasing.

- **Textile Export Classification:** Aggregate picture of exports of the sector has been divided into contribution of cotton textiles and non-cotton textiles. In each of these categories, the contribution of low value added segments (fibre, yarn, and fabrics), and high value added segments (readymade garments, and made-ups) has been examined for time series data, and for the years 2014-15 and 2015-16. Along with absolute values of exports of these components in Rs. Mn US\$, percentage change over the previous year, and percentage share have been calculated.

India's textiles and apparels industry is one of the mainstays of the national economy. It is also one of the largest contributing sectors to India's exports. The report of the working group constituted by the Planning Commission on boosting India's manufacturing exports during 12<sup>th</sup> Five Year Plan (2012-17) envisages

India's exports of textiles and apparels at US\$ 64.41 billion by the end of March, 2017. As per the UN Comtrade database<sup>14</sup>, the top 5 textile and apparel exporting nations in 2013 were China, India, Italy, Germany and Turkey and China was the largest exporter with 67% share while India stood at a distant second place with 10% share in world's textiles and apparels exports.

**Table 2.5: Textile Exports Classification**

COMMODITIES	UNIT	QUANTITY (in tons)		(VALUE IN RS. Mn.)			(VALUE IN Mn US\$)		
		2014-15	2015-16	2014-15	2015-16	% Variation	2014-15	2015-16	% Variation
		Apr-Feb							
<b>I FIBRE</b>									
Cotton Raw Incl. Waste		1009990	1245172	104400.82	118489.01	13.49	1710.93	1813.98	6.02
Manmade Staple Fibre		N.A.	N.A.	30835.41	32523.64	5.47	505.33	497.91	-1.47
Silk Raw	TON	5	9	5.74	14.35	150.00	0.09	0.22	133.54
Wool Raw	TON	11	91	1.03	29.57	2770.87	0.02	0.45	2581.88
Silk Waste	TON	1541	1428	1030.18	822.13	-20.20	16.88	12.59	-25.45
<b>SUB-TOTAL</b>		N.A.	N.A.	136273.18	151878.70	11.45	2233.25	2325.15	4.11
<b>II YARN / FABRICS / MADEUPS</b>									
Cotton Yarn	TON	1149815	1193496	219040.97	215873.60	-1.45	3589.66	3304.86	-7.93
Cotton Fabrics, Madeups Etc.		N.A.	N.A.	308362.69	314350.17	1.94	5053.47	4812.46	-4.77
Natural Silk Yarn, Fabrics, Madeup		N.A.	N.A.	7013.88	5075.33	-27.64	114.94	77.70	-32.40
Manmade Yarn, Fabrics, Madeups		N.A.	N.A.	296567.22	279985.95	-5.59	4860.16	4286.37	-11.81
Wollen Yarn, Fabrics, Madeups Etc.		N.A.	N.A.	11183.06	11599.07	3.72	183.27	177.57	-3.11
Other textile yarn, fabrics, madeups etc		N.A.	N.A.	22480.33	19925.07	-11.37	368.41	305.04	-17.20
<b>SUB-TOTAL</b>		N.A.	N.A.	<b>864648.15</b>	<b>846809.19</b>	<b>-2.06</b>	<b>14169.91</b>	<b>12964.01</b>	<b>-8.51</b>

COMMODITIES	UNIT	QUANTITY (in tons)		(VALUE IN RS. Mn.)			(VALUE IN Mn US\$)			
		2014-15	2015-16	2014-15	2015-16	% Variation	2014-15	2015-16	% Variation	
		Apr-Feb								
<b>III</b>	<b>RMG</b>									
	Rmg Cotton Including Accessories		N.A.	N.A.	515479.02	540631.44	4.88	8447.71	8276.66	-2.02
	Rmg Silk		N.A.	N.A.	16781.54	14940.10	-10.97	275.02	228.72	-16.83
	Rmg Manmade Fibres		N.A.	N.A.	218925.64	247144.67	12.89	3587.77	3783.60	5.46
	Rmg Wool		N.A.	N.A.	17722.44	16279.19	-8.14	290.44	249.22	-14.19
	Rmg Of Other Textile Material		N.A.	N.A.	162510.04	190000.97	16.92	2663.23	2908.77	9.22
	<b>SUB-TOTAL</b>		<b>N.A.</b>	<b>N.A.</b>	<b>931418.68</b>	<b>1008996.37</b>	<b>8.33</b>	<b>15264.15</b>	<b>15446.97</b>	<b>1.20</b>
<b>IV</b>	<b>CARPET</b>									
	Carpet (Excl. Silk) Handmade		N.A.	N.A.	75913.49	85979.21	13.26	1244.08	1316.28	5.80
	Carpet (Excl. Silk) Millmade		N.A.	N.A.	0.00	0.00	0.00	0.00	0.00	0.00
	Silk Carpet		N.A.	N.A.	149.58	160.04	6.99	2.45	2.45	-0.05
	<b>SUB-TOTAL</b>		<b>N.A.</b>	<b>N.A.</b>	<b>76063.07</b>	<b>86139.25</b>	<b>13.25</b>	<b>1246.53</b>	<b>1318.73</b>	<b>5.79</b>
<b>V</b>	<b>JUTE</b>									
	Jute Yarn	TON	79913	16115	1213.18	1117.21	-7.91	19.88	17.10	-13.97
	Jute Raw	TON	34868	19867	1106.82	867.70	-21.60	18.14	13.28	-26.77
	Jute Hessian		N.A.	N.A.	7098.12	7419.66	4.53	116.32	113.59	-2.35
	Floor Covering Of Jute		N.A.	N.A.	4816.06	4017.80	-16.57	78.93	61.51	-22.07
	Other Jute Manufactures		N.A.	N.A.	6509.89	22129.65	239.94	106.68	338.79	217.56
	<b>SUB-TOTAL</b>		<b>N.A.</b>	<b>N.A.</b>	<b>20744.07</b>	<b>35552.02</b>	<b>71.38</b>	<b>339.96</b>	<b>544.27</b>	<b>60.10</b>
	COIR and COIR MANUFACTURERS		N.A.	N.A.	15895.31	15044.34	-5.35	260.49	230.32	-11.58
	HANDICRAFTS (EXCL. HANDMADECRFTS)		N.A.	N.A.	77234.08	97945.31	26.82	1265.72	1499.47	18.47
	HANDLOOM PRODUCTS		N.A.	N.A.	20954.29	22030.39	5.14	343.40	337.27	-1.79
	<b>SUB-TOTAL</b>		<b>N.A.</b>	<b>N.A.</b>	<b>114083.68</b>	<b>135020.04</b>	<b>18.35</b>	<b>1869.61</b>	<b>2067.06</b>	<b>10.56</b>
	<b>GRAND TOTAL</b>	<b>N.A.</b>	<b>N.A.</b>	<b>2143230.83</b>	<b>2264395.57</b>	<b>5.65</b>	<b>35123.42</b>	<b>34666.19</b>	<b>1.30</b>	

**Table 2.4 Source: Foreign Trade Statistics of India (Principal Commodities and Countries), DGCIS, Kolkata.**

The Indian textile export basket consists of wide range of items containing cotton yarn and fabrics, man-made yarn and fabrics, wool and silk fabrics, made-ups and variety of garments. The Indian textile industry contributed about 14% to the Index of Industrial Production, 4% to the country's GDP and 17% to the country's export earnings. Around 8% of the total excise revenue collection is contributed by the textile industry.<sup>xviii</sup> the industry currently estimated at around US \$108 billion, and is expected to reach US \$ 141 billion by 2021<sup>xix</sup>. As textiles accounted for 5.65 percent of the global share and 14 percent of India's total exports in 2015-16. India, however, stands at the cross roads in exports, facing stiff competition from China, Bangladesh, EU, Hongkong, Vietnam, Indonesia, the USA and Canada. However, with favorable government policies and schemes like allowing 100% FDI in Textile sector, Amended Technology Upgradation Fund Scheme, (ATUFS),

Technology Mission on Technical Textiles (TMTT), establishment of Focus Incubation Centers, Market Development Assistance, Mega Cluster Development Schemes etc., the textile sector is sure to continue to be at the forefront of not only the Indian economy, but also touch new heights in world exports<sup>xx</sup>.

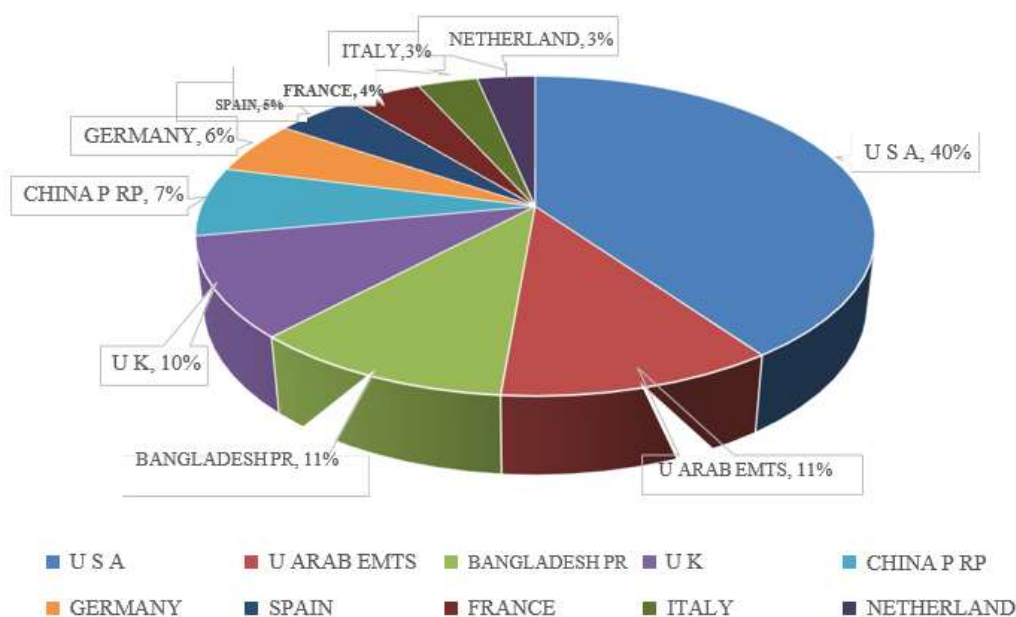
**Table 2.6: India's Top Ten Export Markets of Textile and Apparel products**

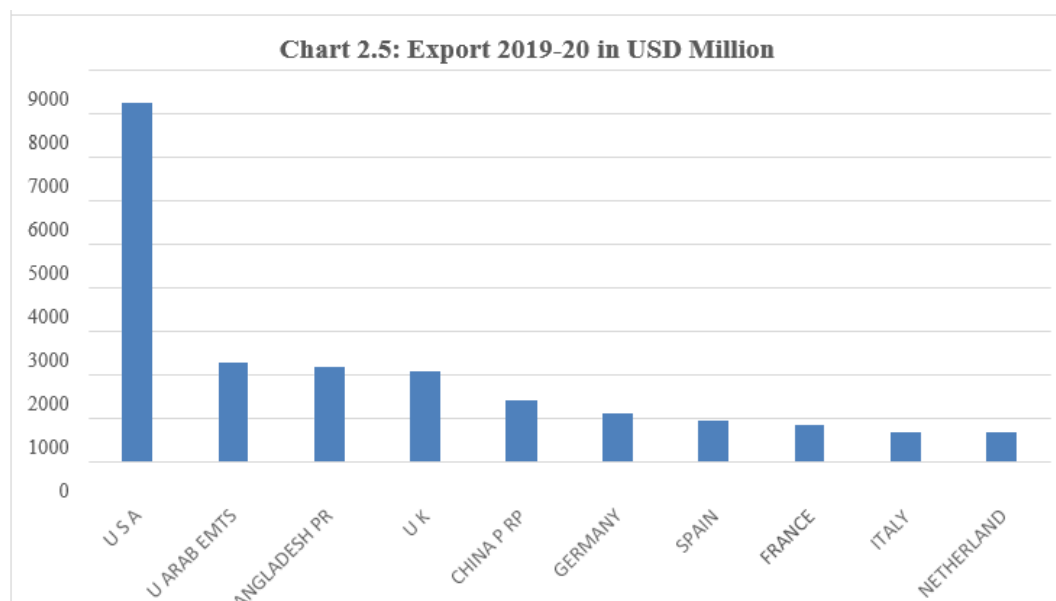
Sr. No.	Country	Export 2019-20 in USD Million	% Share
1	U S A	8255	22%
2	U ARAB EMTS	2279	6%
3	BANGLADESH PR	2172	6%
4	U K	2071	6%
5	CHINA P RP	1441	4%
6	GERMANY	1112	3%
7	SPAIN	951	3%
8	FRANCE	862	2%
9	ITALY	698	2%
10	NETHERLAND	676	2%
	<b>Total</b>	<b>20517</b>	<b>55%</b>

**Source:** DGCIandS Ministry of textiles, Government of India (<http://www.texmin.nic.in>)

From the Chart 2.4, USA with 22% of exports from India which possess the highest contribution, where as 2% of contribution from France, Italy and Netherlands relating to the Textiles and Apparel Products.

**Chart 2.4: Export 2019-20 in USD Million**





Source DGCI: Ministry of Textiles

**India's Imports:**

**Table 2.7: Textile Imports Classification**

COMMODITIES	UNIT	QUANTITY (in tons)		(VALUE IN RS. Mn.)			(VALUE IN MnUS\$)		
		2014-15	2015-16	2014-15	2015-16	%Variation	2014-15	2015-16	%Variation
		Apr-Feb							
<b>I FIBRE</b>									
Cotton Raw Incl. Waste		245941	213921	29660.43	23464.94	-20.89	486.08	359.23	-26.10
Manmade Staple Fibre		N.A.	N.A.	22908.85	24527.56	7.07	375.43	375.50	0.02
Silk Raw	TON	3189	3182	8897.45	9091.19	2.18	145.81	139.18	-4.55
Wool Raw	TON	88897	89074	19663.74	18179.94	-7.55	322.25	278.32	-13.63
Silk Waste	TON	105	145	240.79	338.93	40.76	3.95	5.19	31.49
SUB-TOTAL		N.A.	N.A.	81371.26	75602.56	-7.09	1333.52	1157.42	-13.21
<b>II YARN / FABRICS / MADEUPS</b>									
Cotton Yarn	TON	5666	5270	2293.03	2598.56	13.32	37.58	39.78	5.86
Cotton Fabrics, Madeups Etc.		N.A.	N.A.	28550.03	30807.31	7.91	467.88	471.64	0.80
Natural Silk Yarn, Fabrics, Madeup		N.A.	N.A.	2980.47	2765.61	-7.21	48.84	42.34	-13.32
Manmade Yarn, Fabrics, Madeups		N.A.	N.A.	106090.08	104240.01	-1.74	1738.61	1595.84	-8.21
Wollen Yarn, Fabrics, MadeupsEtc.		N.A.	N.A.	3761.28	3606.04	-4.13	61.64	55.21	-10.44
Other textile yarn, fabrics, madeupsetc		N.A.	N.A.	41856.72	46512.39	11.12	685.95	712.07	3.81
SUB-TOTAL		N.A.	N.A.	185531.61	190529.92	2.69	3040.50	2916.87	-4.07



COMMODITIES	UNIT	QUANTITY (in tons)		(VALUE IN RS. Mn.)			(VALUE IN MnUS\$)		
		2014-15	2015-16	2014-15	2015-16	%Variation	2014-15	2015-16	%Variation
		Apr-Feb							
<b>III</b>	<b>RMG</b>								
	Rmg Cotton Including Accessories	N.A.	N.A.	13327.95	16121.82	20.96	218.42	246.81	13.00
	Rmg Silk	N.A.	N.A.	348.93	291.49	-16.46	5.72	4.46	-21.96
	Rmg Manmade Fibres	N.A.	N.A.	8049.83	10187.38	26.55	131.92	155.96	18.22
	Rmg Wool	N.A.	N.A.	950.78	873.54	-8.12	15.58	13.37	-14.17
	Rmg Of Other Textile Material	N.A.	N.A.	7016.58	7665.31	9.25	114.99	117.35	2.05
	SUB-TOTAL	N.A.	N.A.	29694.07	35139.54	18.34	486.63	537.96	10.55
<b>IV</b>	<b>CARPET</b>								

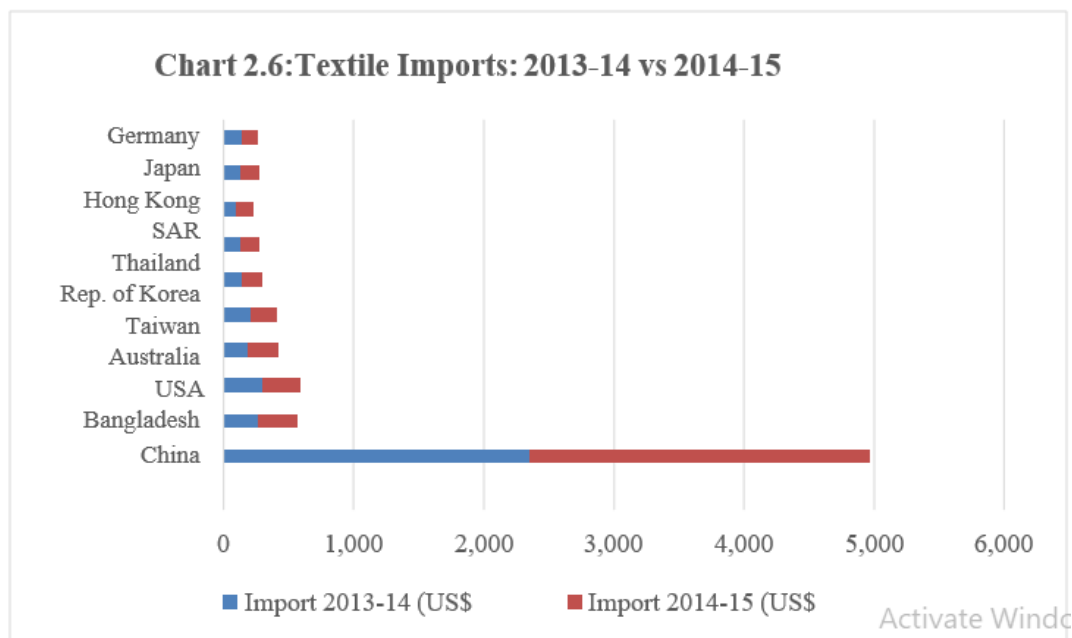
**Source:** Foreign Trade Statistics of India (Principal Commodities and Countries), DGCIS, Kolkata.

The Table 2.7 highlights the imports of India's textile items in the categories of Fibre, Yarn and fabrics of low value added segments and high value added segments (readymade garments and made-ups) has been examined for time series data, and for the years 2014-15 and 2015-16. The Table 2.7 shows that imports value was declined from the year 2014-15 to 2015-16 in terms of subtotal fibers; Yarn/fabrics imports value also declined from 2014-15 to 2015-16; however RMG commodities imports value increased from 2014-15 to 2015-16; Carpet commodities imports value increased from the 2014-15 to 2015-16. The Jute related commodities imports value increased from the year 2014-15 to 2015-16.

**Table 2.8: India's Top Ten Import Markets of Textile and Apparel products.**

Sr. No	Countries	Import 2013-14 (US\$ Mn)	%Share	Import 2014-15 (US\$ Mn)	%Share	Y-o-Y Growth
1	China	2,351	60%	2,624	60%	12%
2	Bangladesh	265	7%	305	7%	15%
3	USA	292	7%	292	7%	0%
4	Australia	186	5%	235	5%	26%
5	Taiwan (Other Asia, nes)	205	5%	203	5%	-1%
6	Rep. of Korea	142	4%	154	4%	9%
7	Thailand	126	3%	151	3%	20%
8	Hong Kong SAR	93	2%	143	3%	54%
9	Japan	129	3%	142	3%	10%
10	Germany	137	3%	122	3%	-10%
	<b>Sub Total</b>	<b>3,924</b>		<b>4,371</b>		11%
	<b>Total Textile and Apparel import</b>	<b>6,175</b>		<b>6,981</b>		13%

**Source:** DGCI, Ministry of Textiles, Government of India

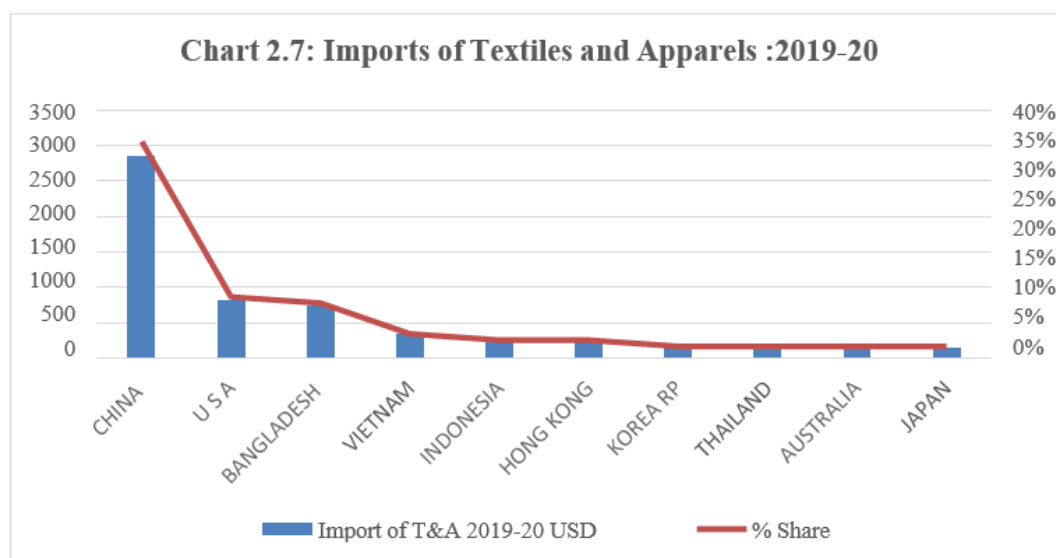


The Table: 2.8 shows China makes Top Ten Import countries with an increasing market share of India's top ten import markets of textile and apparel (Tanda) products with 12 % as compared with previous year, however Hongkong SAR, Australia and Thailand better increased market share as compared with 2013-14 vs 2014-15 in case of imports.

**Table 2.8: India's Top Ten Import Markets of Textile and Apparel products**

Sr. No.	Country	Import of Tanda 2019-20 USDMillion	% Share
1	CHINA	2864	35%
2	U S A	815	10%
3	BANGLADESH	747	9%
4	VIETNAM	353	4%
5	INDONESIA	262	3%
6	HONG KONG	229	3%
7	KOREA RP	200	2%
8	THAILAND	181	2%
9	AUSTRALIA	162	2%
10	JAPAN	155	2%
	<b>Sub-Total</b>	<b>5970</b>	<b>73%</b>

**Source:** DGCI and S. Ministry of Textiles, Government of India



### Global Textile and Apparel Trade Performance and India's Imports and Exports

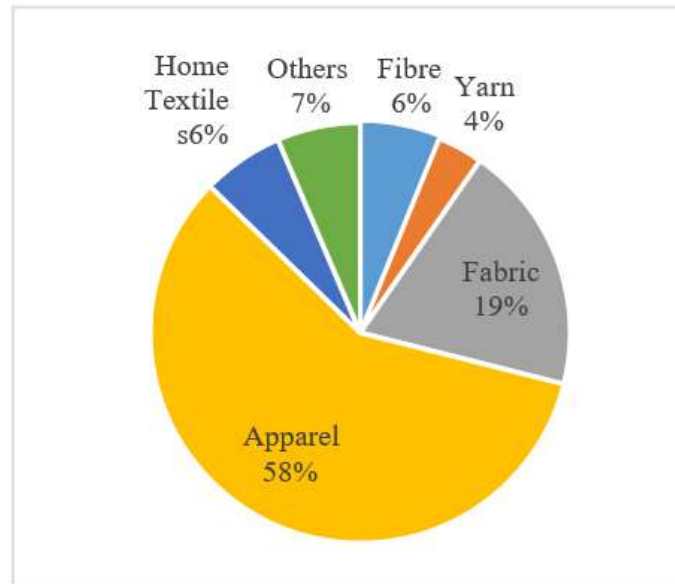
(Source: <https://citiindia.org/statistics/global-textile-and-apparel-trade/>)

Global trade of textile and apparel stumbled in 2016 for a consecutive year due to weak global demand. Data from UN Comtrade shows a 1.4% decline to US\$ 765 billion for 2016 from US\$ 776 billion in 2015, which is a cause of concern for many developing countries. Overall the total value of world merchandise exports have also declined by 3.2% in 2016 to US\$ 16 trillion from US\$ 16.5 trillion in 2015. Some of the key reasons for the decline in global exports are economic slowdown in China, strong fluctuations in exchange rates, and financial volatility driven by divergent monetary policies in developed countries.

**Table 2.10: Category- wise global textile and apparel trade**

Values in US\$ Mn.	2015	2016	CAGR
Fibre	53	47	-11.3%
Yarn	29	27	-6.9%
Fabric	148	147	-0.7%
Apparel	444	446	0.5%
Home Textiles	50	48	-4.0%
Others	52	49	-5.8%
<b>Total TandA</b>	<b>776</b>	<b>765</b>	<b>-1.4%</b>
<b>Total All commodities</b>	<b>16,489</b>	<b>15,955</b>	<b>-3.2%</b>

**Chart 2.8: Category-wise share in global trade (2016)**



**Data Source:** UN Comtrade database, WTO statistics

Apparel is the largest traded category with a share of 58%. This is followed by fabric, home textiles, fibre and yarn with a share of 19%, 6%, 6% and 4% respectively. Apparel is the only category that shown a positive growth of 0.5%, while there has been decline in trade in all other categories. European Union, USA and China remained the top 3 markets for textile and apparel in 2016. They together accounted for 53% of the world textile imports in 2016, while top 10 markets accounted for share of 68%. All the ten markets have reported a decline in the value of textile and apparel imports in 2016, with highest decline seen in UAE (-24%) and Vietnam (-13%). The smallest decline was recorded in Japan (-3%).

The ranking of the top ten exporters of textile and apparel products remained unchanged in 2016, with China (36%), India (5%) and Bangladesh (4%) in the first three positions. Top 10 suppliers accounted for 70% of the world exports of textile and apparel exports in 2016 (compared to 68% in 2015). Of the top 10 exporters only three saw an increase in value of their exports in 2016: Italy (1%), Spain (4%) and France (1%). The other top exporters recorded declines ranging from -1% to -7%. Maximum decline was registered by China (-7%) and its share in global textile and apparel trade has also reduced from 39% in 2015 to 36% in 2016. In the EU market, share of top 15 suppliers has increased from 77% in 2015 to 82% in 2016. EU's largest supplier viz. China has registered 8% decline in its trade. Cambodia is the fastest growing supplier with 78% increase in its supplies during 2016. Bangladesh, Pakistan and Poland also registered double digit y-o-y growth. In the US market, share of top 15 supplier nations has increased from 89% in 2015 to 90% in 2016. USA's imports from China have decreased y-o-y by 7%. Cambodia and Guatemala are fastest growing suppliers to USA with 22% and 17% y-o-y growth. Imports from India and Jordan have also increased y-o-y by 2% and 1% respectively while imports from remaining suppliers have declined.

**Table 2.11: Change in Imports of EU-28 from Top Supplier Nations**

Sr. No	Supplier	2015	2016	%change
1	China	56.2	51.6	<b>-8%</b>
2	Germany	23.4	21.9	-6%
3	Bangladesh	16.3	18.9	16%
4	Italy	17.6	17.7	0.4%
5	Turkey	16.3	16.2	-0.3%
6	Belgium	12.4	12.8	3%
7	Spain	10.0	10.3	3%
8	France	9.3	9.6	4%
9	India	9.27	9.26	-0.1%
10	UK	8.9	8.5	-4%
11	Poland	5.8	6.4	10%
12	Pakistan	5.1	5.8	14%
13	Portugal	4.4	4.7	8%
14	Cambodia	2.5	4.5	78%
15	Denmark	4.0	4.1	3%
	R.O.W	61.5	43.4	<b>-29%</b>
	<b>Total</b>	<b>263</b>	<b>246</b>	<b>-7%</b>

**Table 2.12: Change in Imports of USA from Top Supplier Nations**

Sr. No	Supplier	2015	2016	%change
1	China and HK	51.6	48.1	<b>-7%</b>
2	Viet Nam	11.3	10.8	-4%
3	India	7.4	7.5	2%
4	Mexico	5.9	5.6	-5%
5	Bangladesh	5.8	5.6	-5%
6	Indonesia	5.4	3.8	-29%
7	Pakistan	3.9	2.9	-27%
8	Canada	3.0	2.4	-20%
9	Cambodia	1.8	2.2	22%
10	Sri Lanka	2.1	2.1	-0.03%
11	Italy	2.3	2.1	-6%
12	El Salvador	1.98	1.97	-0.1%
13	Guatemala	1.2	1.5	17%
14	Jordan	1.25	1.27	1%

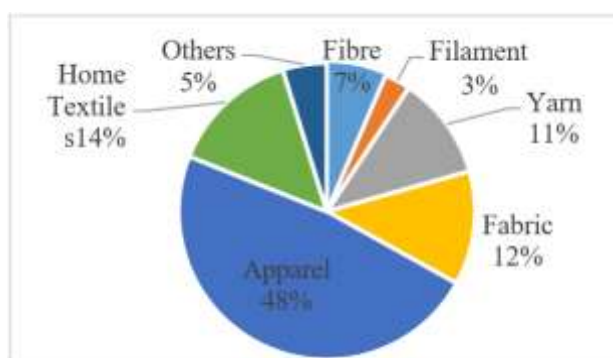
Sr. No	Supplier	2015	2016	%change
15	Rep. of Korea	1.3	1.2	-5%
	R.O.W	13.3	10.7	-20%
	<b>Total</b>	<b>120</b>	<b>110</b>	<b>-8%</b>

**Data Source:** UN Comtrade database

India's textile and apparel exports have declined from US\$ 37.2 billion in 2015 to US\$ 35.4 billion in 2016 at a rate of 4.7%.

**Table 2.13: Segment wise textile and apparel exports from India (In US\$ mn.)**

Category	2015	2016	% change
Fibre	2.7	2.3	-15%
Filament	1.1	1.0	-6%
Yarn	4.5	4.0	-12%
Fabric	4.9	4.4	-10%
Apparel	17.1	17.0	-1%
Home Textiles	5.1	5.0	-2%
Others*	1.6	1.7	3%
<b>Total</b>	<b>37.2</b>	<b>35.4</b>	<b>-4.7%</b>

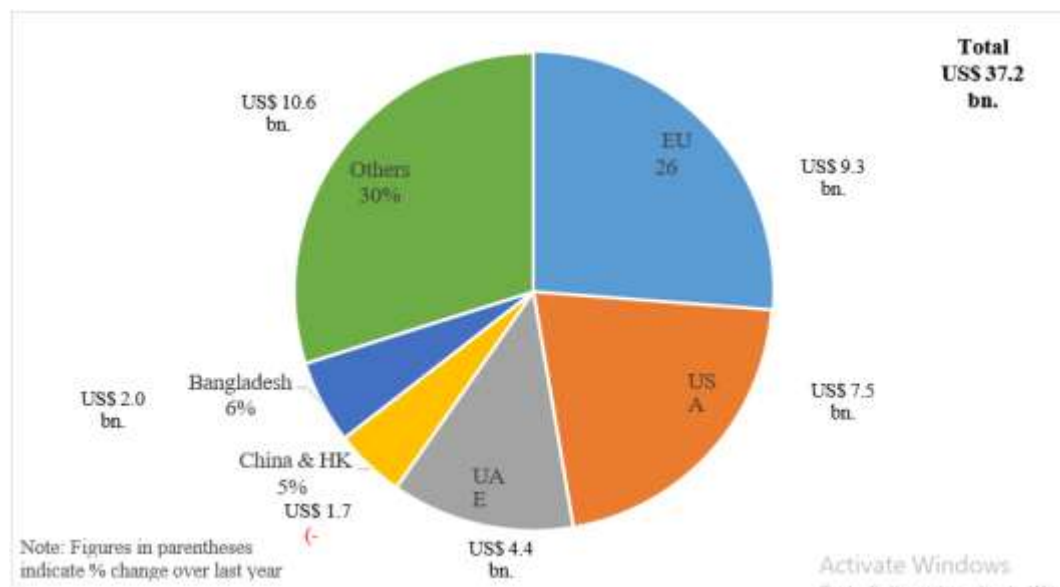


**Figure 2.9: Segment-wise share in global trade (2016)**

\*Others include sacks and bags, dress patterns, twine, worn clothing, etc.

**Data Source:** UN Comtrade.

Apparel is the largest category exported from India having a share of 48% in the total textile and apparel exports during 2016. Home Textiles is the second largest category with a share of 14% in 2016 followed by fabric and yarn with a share of 12% and 11% respectively. All categories have shown de-growth.



**Figure 2.10: Top Markets for Textile and Apparel Products for India (2016)**

**Data Source:** UN Comtrade.

European Union continues to remain the biggest market for Indian textiles and apparel products in 2016 with a share of 26% followed by USA with a share of 21%, UAE with a share of 12%, Bangladesh with a share of 6% and China with a share of 5% respectively. Textile and apparel exports to USA have shown a positive growth of 2% over last year while exports to China have shown a sharp decline of 29% in the same period.

## 2.8 Initiatives of the Government in the Textile Industry:

### 2.8.1 Technology Upgradation Fund Scheme (TUFS):

The Government has launched Technology Upgradation Fund Scheme (TUFS) for textiles as well as for Jute industries. The program is going to continue to offer reimbursement of fascination energized by the lending company, on a task of technology upgradation in conformity together with the plan. The scheme is going to continue to provide coverage for foreign exchange rupee fluctuation<sup>xxi</sup>.

- The scheme highlights the interest subsidy / capital subsidy / margin cash subsidy on the fundamental importance of the machineries and excludes, the tax part for the objective of valuation, within view of the decision for non-subsidizing the fees.
- The scheme delivers the capital subsidy on purchase of the brand new equipment and machinery for the pre loom as well as post loom operations, handlooms /upgradation of testing and handlooms or quality management equipment, for handloom generation devices.
- Other investments including energy saving systems, effluent treatment plant, in house RandD, IT like ERP, TQM including adoption of ISO / BIS requirements, CPP etc.

(which includes non-conventional sources) as stated previously of the current system, will be qualified for the advantages of the plan.

- d. For a certain thrust to garmenting, machineries for CAD, CAM and the like and design studios, will probably be incorporated in the distinct proceeding of the standards of the system, with a monetary capital to be based on the Inter Ministerial Steering Committee (IMSC) underneath the Chairmanship of the Secretary (Textiles).
- e. Investments as land, margin money, pre-operative expenses, and factory building for working capital, will be ineligible for the gain of reimbursement under the system, aside from the apparel market as well as handloom with pre-existing fifty percentage capacity. In case, the apparel unit is engaged in other activity, the eligible investment under this head will only be related to plant and machinery, eligible for manufacturing of apparel<sup>xxii</sup>.

### **2.8.2 Technology Mission on Cotton (TMC):**

To be able to enhance the production, quality and efficiency of cotton in the nation by getting the whole gamut of Research and Development, Processing and Marketing of cotton under one umbrella by the way of a mission strategy, the Government of India has released Technology Mission on Cotton (TMC) in February, 2000.

The mission comprises 4 mini-missions that are being jointly applied by the Ministry of Agriculture and Ministry of Textiles. Among the crucial ingredients of the Mission it is cotton processing facilities by updating or modernizing the current ginning and pressing facilities and creating of the brand new industry yards or enhancement of current promote yards. The Technology Mission on Cotton was giving a focused impetus to cotton research and development.

The mission seeks to handle the problems of increasing efficiency, improving quality, and also lowering the price of production that will supply the much needed naturally competitive advantage on the textile industry, together with ensuring appealing return shipping to cotton farmers.

The mission consists of 4 Mini missions (MM) with particular goals of:

- MM I Research
- MM II Dissemination of Technology to farmers
- MM III Improvement in Marketing infrastructure;
- MM IV Modernizing of ginning and pressing factories.

Indian Council of Agricultural Research (ICAR), and the Ministry of Agriculture are definitely the Nodal Agencies for Mini Missions one as well as two, respectively. The Ministry of Textiles is applying the latter 2 Mini Missions. The tenure of Mission three and Mission four of TMC is more extended in terms of completion and target of ongoing projects. This's a consistent process, and currently about 85 % of cotton has been prepared in such modernized industries leading to improvement that is substantial of processing of cotton for the market.



### **2.8.3 Textile Workers Rehabilitation Scheme:**

In order to provide financial help to the employees rendered jobless, on account of the permanent closure of textile mills, (partial closure of mills additionally provided by a consequent amendment of the scheme), the Government had made the Textile Workers' Rehabilitation Fund Scheme, in pursuance of the textile policy of June, 1985<sup>xxiii</sup>.

### **2.8.4 Price Regulation:**

The Price Regulation Measures for cotton are essential to allow Indian cotton textile sector participate with the majority of the planet. Indian cotton costs are rising several occasions as a result of the effect of rising cotton exports. It leads to rise in the production expense of complete value added items, moreover Cotton Textile Industry facing problems to participate in the overseas market.

### **2.8.5 Cotton Advisory Board (CAB):**

The Cotton Advisory Board (CAB) is a representative body of Government agencies, farmers, trade and market. It advises the Government typically on issues pertaining to production, marketing and consumption of cotton, and additionally offers a community forum for liaison with the cotton textile mill industry, the cotton growers, the cotton industry as well as the authorities.

### **2.8.6 Overseas Cotton Advisory Committee (ICAC):**

The International Cotton Advisory Committee is an association of governments having interest in the production, export, use as well as import of cotton. It's a company intended to promote cooperation in the formula of cotton problems, especially those of international significance and scope. The features of the International Cotton Advisory Committee, as outlined in the guidelines as well as Regulations, are:

- To observe as well as keep in touch that is close with developments affecting the planet cotton situation
- To gather as well as disseminate done, authentic, and also regular data on earth cotton generation industry, usage, prices and stocks.
- To suggest, as and when advisable, to the governments represented, any measure the Advisory Committee considers suitable and practicable for the furtherance of international collaboration directed towards developing and maintaining a sound world cotton economy.
- In order to be the forum of overseas discussions on issues related to cotton rates.

### **2.8.7 Cotton Corporation of India (CCI) Limited:**

The job given to the CCI underneath the Textile Policy was undertaking cost support businesses when the market prices of kappa's feels the assistance rates announced by the Government of India with no quantitative limit. The CCI is undertaking commercial

operations at its own risk. The above mentioned role of the CCI ongoing under the brand New Textile Policy of 2000. Nevertheless, CCI purchases cotton even today to undertake export of cotton. Beside the above mentioned function, CCI has likewise been specified as the nodal bureau for implementation of Mini Missions three as well as four for the Technology Mission on Cotton for development as well as Modernization of Ginning and Pressing factories, moreover thereby enhancing the quality of cotton by decreasing pollution of cotton, and also making sure much better rates to the farmers.

### **2.8.8 Organic Cotton Advisory Board (OCAB):**

Organic Cotton is farmed using strategies as well as supplies with very low impact on the earth together with the organic production devices keeping and replenishing soil fertility, decreasing the usage of artificial pesticides, fertilizers and creating a biologically varied farming agricultural system.

Organic cotton advisory board (OCAB) is assessing the need which provides the demand and supply. It suggests the subsidy for manufacturing methods being implemented for cultivation of organic cotton below Mini Mission two of the TMC/ICDP (Integrated Cotton Development Program). The mini keyboard highlights the standards for the foundation of certification, delineation/identification of manufacturing parts along with varieties ideal for natural agriculture.

### **2.8.9 Technology Mission on Technical Textiles (TMTT):**

The Government has set up the "Technology Mission on Technical Textiles" throughout the XI<sup>th</sup> five Year Plan. First off, the Government has authorized the Scheme for Development and growth of specialized Textiles during the XI five Year Plan that comprises of 3 parts;

- Baseline Survey to construct the database of specialized textile industry,
- Creation of understanding of all the business owners,
- Setting up of 4 centers of excellence<sup>xxiv</sup>.

### **2.8.10 National Manufacturing Competitiveness Council (NMCC):**

Globally, the manufacturing tasks now are finding a brand new dimension. The trend is usually to source applications from low-cost countries. India with the previous experience of its, large pool of competent manpower, established raw materials and supply base, plus increasing household volumes, has got the potential to come through as significant production hub for the worldwide market. To harness the opportunities as well as the potential, ideal sector certain interventions with special focus will be the demand of the hour. Textile Sector is one of the kinds of segment that provides quick chances to garner a significant share of the worldwide market. Attaining naturally competitive advantage in 'manufacturing' depends significantly on mitigating constraints; the basic restrictions such as for instance inadequate infrastructure, increased transaction costs, greater interest, regulatory problems and strength in addition to industry certain restrictions including engineering upgradation, industry entry, duty system, competitive scales, managerial practices, etc. Resolution of these restrictions necessitates attention that is focused as well

as activity involving not merely inter-Ministerial/Departmental coordination but additionally better interaction among stakeholder's viz., education, financial institutions, input providers, industry, research and management institutions. NMCC has determined Garments and textiles (TandC) as among the Priority sectors having higher growth opportunity and higher multiplier consequences for work generation. Timely policy intervention is able to increase the competitiveness of this field manifold, as the developed impetus prevailing in the field is attractive.

### **2.8.11 Textiles Committee (TC):**

Textiles Committee is a facilitator devoted to quality improvement towards improving competitiveness of the textiles as well as clothes business. It provides world class strength, throughout the length as well as breadth of the nation, whether it is testing of textiles through its twelve accredited laboratories, inspection, assistance and certification to exporters, consultancy for implementation of ISO 9000 QMS, ISO 14000 EMS, Social Accountability (SA) 8000, OHAS 18001, CSM 2000 standard, Market intelligence as well as sector certain analysis, along with HRD programs of facilitating the bunch development programe<sup>xxv</sup>. It is a one stop look for textile entrepreneurs to deliver competitiveness in the company of theirs. The textile industry, essentially just about the most major sectors in the Indian economy, was a vital focus area for the Government of India. A number of initiatives are considered by the Government to create the market even more competitive by nature. This particular section lists out several of the initiatives which are expected to drive the expansion in the sector. The following would be the authority's initiatives of the scheme.

**Chart 2.11: Initiatives of Government Schemes**

<b>New National Textile Policy</b>	The draft policy has been discussed further with concerned stakeholders. The revised draft of the New Textile Policy is in the process of being approved by the Government.
<b>Technology Up-gradation Fund Scheme</b>	The Government of India established Technology Up-gradation Fund Scheme (TUFS) in 1999 to enable firms to access low-interest loans or technology up-gradation. Handlooms will now be covered under the TUFS. Under this scheme, the Government reimburses 5 per cent of the interest rates charged by banks and financial institutions, thereby ensuring credit availability for up-gradation of technology at global rates. Today it is Amended Technology upgradation fund scheme.
<b>Scheme of Integrated Textile Parks</b>	The Scheme of Integrated Textile Parks is one of the flagship schemes of the Ministry of Textiles. It aims to assist small and medium entrepreneurs in the textile industry by providing financial support for world class infrastructure in the parks. 13 new textiles parks have been approved and will receive a grant to the extent of `520 crores from government for infrastructure development. They are estimated to bring in private investment of about `3,240 crores into the sector and generate direct employment for about 35,000 persons over the next three years.

<b>Boosting Exports</b>	With a vision to create an export friendly economy, the government has introduced several initiatives such as duty free entitlements, 24/7 customs clearance facilities, etc.
<b>Foreign Direct Investment (FDI) Policy</b>	The government has allowed 100% FDI in the textile sector under the automatic route since 2006. The Ministry of Textiles has set up an FDI Cell to attract FDI in the sector with the objectives of providing assistance and advisory support, assisting foreign companies in identify JV partners, providing operational support, maintaining and monitoring production and investment data.
<b>Promotion of Technical Textiles</b>	A new ₹427 crore scheme has been launched to popularize the use of Geotechnical textiles in the North East States. The scheme empowers the administrative machinery to adopt this technology, promote establishment of the supply chain and set up manufacturing units of Geo-tech.
<b>Handloom Mega Cluster Scheme</b>	Development of tassar handloom products like sarees, dress material and a wide range of home furnishing fabric for exports typical to Bhagalpur in Bihar has been initiated under the Mega Cluster Scheme. Another megacluster is being developed at Trichy, Tamil Nadu. Over 15,000 handloom weavers will directly benefit from these two clusters. The remaining new mega clusters at Surat, Bareilly, Lucknow, Kutch and Mysore are at various stages of implementation.
<b>Linking Textile with Tourism</b>	The process for linking textiles with tourism has been worked out in consultation with the Ministry of Tourism. Guidelines have been circulated to state governments in January 2015. The development of Raghurajpur crafts village in Orissa as a destination village at a project cost of ₹10 crores has been approved in January 2015.
<b>Integrated Skill Development Scheme</b>	The scheme was introduced to impart employable skills to workers in different segments of the industry. The objective was to train approximately 26.75 lakh persons over a span of 5 years. The Ministry is also in the process of expanding the implementation of the scheme in the Public-Private Partnership mode. With a vision to encourage and train the youth of Jammu and Kashmir for fashion design and thereby generate employment opportunities the Government has increased its financial support for setting up an NIFT center in Srinagar
<b>Quality Control and Improvement</b>	The Textile Commission, under the Ministry of Textiles, facilitates firms in the industry to improve their quality levels and also facilitates recognized quality certifications. Out of 250 textile companies that have been taken up by the Commission, 136 are certified ISO 9001. The other two certifications that have been targeted by the Commission are ISO 14000 Environmental Management Standards and SA 8000 Code of Conduct Management Standards.

Source: ASSOCHAM, Textiles and Apparels Study Report, 2015.

## **2.9 Present State of Textile Industry:**

### **2.9.1 Absence of Forward Planning:**

The pressure on the SME's is increasingly significant over the years owing to the expansion in the dimensions of SME's. There has been significant increase in the amount of work. Planning which is resorted to already in SMEs take care just of daily operational matters.

As an outcome, making interim arrangements and adhoc becomes essential every once in a while to meet up with the immediate requirements. Planning usually results in an output. A good plan leads to a good outcome for the business. A bad plan is likely to become worse than no plan because of the tendency to honor the written word. Planning plays a vital part in all of areas of activity. As every SME's needs to control the finances in a lot each year, it's needless to highlight that preparation have to be offered increasing importance. Further, long-term preparation has to be given better interest in SME's not simply to make sure advancement, but additionally to confirm far better items to clients.

### **2.9.2 Lack of Clarity in Responsibilities and Duties:**

No specific duties and responsibilities have been assigned to different levels in the hierarchy. The duties and responsibilities and roles of different categories of staff have not been clearly defined and made known to them. As a result, there is no proper distribution of work, which often results in duplication.

### **2.9.3 Lack of Delegation and Decentralization of Authority:**

The observations on the management procedure of SMEs show that there's no particular delegation of power at various levels. Consequently, quick decision making is completely lacking at almost all the levels, routine and important matters are handed over to the higher officers. Therefore, Decentralization is recommended in textile enterprises.

### **2.9.4 Faulty Staffing Procedures:**

Staffing is selecting, employing, orienting and putting individuals in productive and favorable environment. A SME can be staffed with personnel that are able to contemplating and also have, a viewpoint of developmental instructions with right orientation. The main weaknesses of SME's are mostly associated with personnel. This has shortage of staff members at greater levels, not enough specialized team, unsatisfactory techniques of recruitment, inadequate provision of in-service education.

### **2.9.5 Inadequate Leadership:**

Leadership appears as an instrument for bringing about balance and stability on the product. But unfortunately those who become the heads of the institutions are unable to lead the people effectively towards the common goals owing to lack of knowledge of the skills which are required for a leader.

A leader is anticipated to determine the issues of the followers and resolve them properly to the very best of the satisfaction of theirs. It's discovered that usually the frontrunners in SMEs decide to be autocratic instead of participative, which is needed for SME's.

### **2.9.6 Lack of Motivation:**

Motivation is the procedure of channeling someone's internal drives to ensure- Positive way i.e.; really wants to achieve objectives of the business. The goal of inspiration is creating conditions where individuals are ready to utilize zeal, initiative, enthusiasm and interest with an impressive group and individual satisfaction, so that the objectives of the group could be attained effectively. Unfortunately efforts were not made by the majority of the SME's to use the various theories of motivating personnel to get the desired goals and then to produce a sensation of participation.

### **2.9.7 Imprudent Financing:**

Financing has a far reaching effect on the performance of a SME. Inadequate, inefficient and untimely financing structure negatively consequences the functionality of the SMEs and also hampers the growth as well as development of SMEs. The existing arrangement is being affected by several weakness like defective financial planning, weak fiscal organisation, uncoordinated financing, unscientific accounting and reporting methods as well as bad auditing.

### **2.9.8 Lack of Decision Making at All Levels:**

The top person in all the institutions makes the decisions, middle level and lower level management is responsible for their implementation. Without the top person's signature, nothing can be undertaken, whether the decision is significant or insignificant. Thus, the entire system of SME's is suffering from lack of decision making at all levels.

### **2.10 Need for KM Variables:**

The construct of knowledge may be seen as composite construct resulting from interaction and interplay of data, information, rules, procedures, best practices and traits such as attention, motivation, creativity and innovation. From a pragmatic perspective, the dynamic nature of knowledge provides a more realistic construct having human and social interactions towards performance outcomes. Many managers may not know which variables may contribute to improve KM programs success and many may still to find out variables hindering the KM implementation. This study aims to identify and evaluate the enablers affecting knowledge management (KM) implementation in Indian Small and medium manufacturing enterprises. Appropriate handling with these enablers may help to ensure effective KM implementation and a realization of the promised benefits for SMEs.

Factors (or Enablers) affecting KM implementation in SME's are complex in nature and abundant in number. However, a list of enablers of KM implementation has been identified based on a review of the related literature and discussions with experts in the field.

Based on the survey's empirical data, the key knowledge management enablers such as organizational culture, people, IT, HRM practices which will influence the knowledge creation process, interlinking with organizational creativity and organizational performance which have been shown to be the extremely important enablers for KM implementation in Indian textile small and medium scale enterprises. A conceptual model has also been presented which has been based upon the results of the statistical analysis of questionnaire-based survey conducted and subsequent discussions on the results.

## **2.11 Conclusion:**

Indian textile industry should not only rely on its strengths, but should also endeavor to remove its weaknesses. The industry has the potency and a great challenge ahead. It is worth noting that China, Hong Kong, South Korea and Taiwan have registered their presence significantly, in the world textile market, through conscious efforts, while they continued to globalize their textile economy. The industry has witnessed significant growth during the last decade in terms of installed spindle, production of yarn output of cloth and its per capita availability as also exports. However, as product life cycles have decreased and environmental complexity and volatility have increased, the need to manage knowledge is intensifying, particularly across the value chain. Firms view knowledge and knowledge management as part of their strategic orientation. The difficulties of managing knowledge of are faced by firms of all sizes. Low- cost strategies may emphasize knowledge that can be used to cut costs, lower prices, and shorten cycle times whereas differentiation strategies may emphasize knowledge that adds value to a product giving it unique characteristics that serve to differentiate it from the competition. So, this chapter highlights the overview of textile industry and there is a need for KM variables in textile industry to solve problems.

## **2.12 Literature Review:**

### **2.12.1 Framework for Categories of Knowledge:**

#### **a. Knowledge Concept:**

Leonard-Barton (1995)<sup>i</sup> highlighted the knowledge is an action based. She deemed knowledge management as activities that build a firm's capabilities.

Nonaka and Takeuchi (1995)<sup>ii</sup> proposed knowledge creation process is comprised of revealing tacit understanding, building principles, justifying principles, creating an archetype and cross leveling knowledge. They defined knowledge as "a dynamic human practice of determining individual perceptions towards the reality".

Pentland (1995)<sup>iii</sup> defined knowledge as an item of a continuing set of methods lodged in the physical and social structures of the organizations. Particularly, he recommended that knowledge is definitely preserved in certain social collectivity and it is governed by the cultural assumptions.

Wiig (1995)<sup>iv</sup> proposed the knowledge consists of judgments, concepts and methods that are kept over time and remembered from situation to situation.

Sveiby (1996)<sup>v</sup> defined knowledge is an vital tool for sustainable earnings.

Spek and Spijervet (1997)<sup>vi</sup> defined knowledge as summing of procedures, experiences, and insights. It guides thoughts and behavior of people. They suggested that knowledge is definitely applicable in many situations.

Delphi (1998)<sup>vii</sup> defined knowledge resides in the brains of individuals who are accustomed to use to making choice in before un-encountered circumstances.

According to Prusak and Davenport (1998)<sup>viii</sup> the personal and contextual factors of knowledge means: knowledge embedded commonly not only in repositories or documents but additionally in organizational routines, practices, processes and norms. Since, knowledge is a multifaceted concept with multilayered meanings, philosophies and sages have debated the idea of knowledge over ages.

KPMG (1998)<sup>ix</sup> proposed knowledge cycle explains the 7 basic concepts. These are creation, application, exploitation, dissemination, sharing, encapsulation, locating and learning; Knowledge can be understood as experience, facts, rules, assertions and concepts about those subject areas that are crucial to the business.

Ernst and Young (1998)<sup>x</sup> defined knowledge as thoughts, capabilities, and information which can be enhanced and mobilized to create value. They referred knowledge management as development of processes to link knowledge requirements to the business strategies.

Schuppel et al (1998)<sup>xi</sup> highlighted knowledge management as concerns of logistics, application, distribution and reproduction.

Nonaka et al (2000)<sup>xii</sup> defined knowledge as a dynamic concept induced by people and organization interactions and can be explained in a specific framework as it related to specific time and place

Bock (2001)<sup>xiii</sup> defined knowledge as individual's beliefs for solving organizational problems by synthesizing concepts in epistemology and psychology. He highlighted the Knowledge itself has had its presence in the philosophical discussions even before the Socratic era.

Sheryl and Apostolos (2011)<sup>xiv</sup> stated that knowledge is an information processed by thinking and converted to something permanent in the memory that could be used by an individual to improve his/her way of living by harnessing the world that surrounds him/ her.

#### **b. Classification of Knowledge:**

The classification of knowledge is foundation of knowledge management processes. Therefore, many researchers classify knowledge for their own knowledge framework.



Leonard-Barton (1995)<sup>xv</sup> classified knowledge into systematic, industry specific, firm-specific awareness. Nonaka and Takeuchi (1995)<sup>xvi</sup> highlighted that Tacit knowledge is context specific and difficult to communicate. Explicit knowledge represents information presented in systematic manner. Tacit knowledge is subjective that is tough to exhibit with numbers, figures, diagrams. Explicit knowledge is rational and objective and could be expressed with formulas, numbers, languages, texts, technical specifications, equations and manuals.

Wiig (1995)<sup>xvii</sup> distinguished between different forms and types of knowledge. They are public, shared expertise, and personal knowledge.

Along with Polanyi's (1997)<sup>xviii</sup>, several authors classified knowledge into tacit and explicit. Arthur D Little (1998)<sup>xix</sup>, Delphi (1998)<sup>xx</sup> also agreed it.

Demarest (1997)<sup>xxi</sup> classified knowledge for business awareness. In this particular sorts, he concentrated on business awareness that is an explicitly designed and also managed system of scripts, rules, patterns and imperatives, embodied in certain area of the firm and sent out all over the firm, which generates industry performances.

Ruggle (1997)<sup>xxii</sup> classified knowledge into procedural knowledge, experiential knowledge, and catalog knowledge.

Jang and Lee (1998)<sup>xxiii</sup> divided knowledge into task knowledge and domain knowledge. However the task knowledge includes benchmarking, brainstorming and best practices. The domain knowledge associated with manuals, reports, patents, products, services.

Probst (1998)<sup>xxiv</sup> classified knowledge into individual and collective knowledge.

Schuppel et al (1998)<sup>xxv</sup> classified knowledge across the 4 bipolar dimensions. First, the inner and outer knowledge, associated with the bearer of the needed knowledge. Next, the actual and future knowledge, related to content of the relevant knowledge. Third, the implicit and explicit knowledge, associated with the aspect of communicability and visibility of knowledge. Fourth, the knowledge created out of rationality and experience, associated with the aspect of validity and richness of knowledge. Bock (2001)<sup>xxvi</sup> classified knowledge as Analyticity and Generality

### **c. Properties of Knowledge:**

Brown and Duguid (1998)<sup>xxvii</sup>, Felin and Hesterly (2007)<sup>xxviii</sup> highlighted the ontological dimension and epistemological dimension of knowledge.

Cowan, David and Foray (2000)<sup>xxix</sup> highlighted the epistemological dimension distinguishes between two types of knowledge; that is implicit and explicit knowledge.

According to Andreeva and Kianto (2011)<sup>xxx</sup>, Knowledge is a key enabler for organizational performance.

#### **d. Knowledge, Knowing and Learning:**

Tywoniak (2007)<sup>xxxix</sup> reported the dynamics of knowledge in organizations within 2 generic dimensions: the ontological and epistemological. The very first design revolves around the epistemological qualities of knowledge. It highlights if it's useful to differentiate between tacit (i. e, non-codified) as well as explicit (i.e., codified) knowledge. The ontological knowledge highlights about why a particular knowledge useful and how it is related to the other things.

Nonaka and Takeuchi (1995)<sup>xxxix</sup> suggests that knowledge is mainly cognitive, including the facts and skills individuals possess.

Tsoukas (1996)<sup>xxxix</sup> highlighted the knowledge as essentially positivist strategy continues to be challenged and complemented by far more constructivist approaches. These approaches highlights that knowledge is seen as mainly behavioral, and therefore it is enacted- every day and overtime- in people's practices.

McInerney (2002)<sup>xxxix</sup> mentioned the big difference between the 2 procedures: constructive and positive corresponds to a subtle yet important distinction between knowledge (i.e., something that people have) and knowing (i.e., something that people do)

Easterby-Smith and Lyles (2003)<sup>xxxix</sup> stated that the fundamental difference between the two fields such as Organizational knowledge and Organizational learning is that while OK treats knowledge mainly as a resource or stock, OL places emphasis on the processes by which knowledge changes or flows.

Vera and Crossan (2003)<sup>xxxix</sup> and King et al (2008)<sup>xxxix</sup> highlighted the Consistent with integrative theoretical approaches. Knowledge and learning, and by the extension Organizational Knowledge and Organizational Learning, can also be viewed as complementary and mutually reinforcing:

“learning is the process through which knowledge is produced as well as designed. Current knowledge impacts future learning“. Under this view, „knowledge and knowing are the content of the learning process“.

#### **e. Knowledge Work as Occupation:**

According to Drucker (1993)<sup>xxxix</sup>, the term „knowledge workers“ describes the word know-how which highlights the people who have extremely high amounts of education or awareness which will come with analytical abilities, also the power to use these capabilities for problem solving in a business.

Frenkel et al. (1995)<sup>xxxix</sup> suggest that the term „knowledge work“ proposed that signals a change toward people-centeredness characterized by a focus on use, creativity, and theoretical knowledge of social and analytical skills. In his view, knowledge employees add value to the firm through their ideas, syntheses, their judgement, their analyses, and also with their design.

Nomikos (1989)<sup>xi</sup> and Reed (1996)<sup>xii</sup>, highlighted that knowledge workers are often equated with employees' professional status such as scientists, engineers, and lawyers, and with particular occupations such as RandD workers, software designers, financial analysts, and telecommunication specialists. In summary, knowledge work is often equated with the so called "new economy" sectors of IT, Finance and professional services.

OECD (2001)<sup>xiii</sup> stated that in a knowledge economy symbolic resources are replacing physical resources, mental exertion is replacing physical exertion and knowledge capital is beginning to challenge money and all other forms of capital.

Warhurst and Thompson(2006)<sup>xiii</sup> stated that, Knowledge work is frequently defined in terms of specific professions, typically comprising jobs associated with IT, R and D and high-tech industries, as well as professions with accreditation requirements in the form of third level qualifications and/or other formal qualifications approved by specific professional institutes.

#### **f. Knowledge Work as Non-routine Work:**

As Argyris (1991)<sup>xiv</sup> highlights benefits of understanding knowledge work and highlighted that cognitive learning is like a calculated knowledge acquisition.

Kelloway and Barling (2000)<sup>xv</sup> argue that „in defining knowledge workers as that those possessing educational or professional qualifications, researchers divert focus from what workers actually do infamous of a focus on what position individuals hold in the organization“.

As Swart and Kinnie (2003)<sup>xvi</sup> note, „doing a clever thing over and over does not mean that it is knowledge-intensive“.

Alvesson's (2004)<sup>xvii</sup> claim that knowledge work is characterized not necessarily by a specific occupational profile, but instead by a „high level of ambiguity in input, process, and output: it may play a less robust role in work and for getting results. This means that we view the knowledge-intensive as *ambiguity-intensive*“.

Benson and Brown (2007)<sup>xviii</sup> have recently put forward a definition of knowledge work based on the distinction between routine and non-routine work.

#### **g. Organizational Knowledge for Learning:**

Argyris and Schon (1974)<sup>xlix</sup> and March (1991)<sup>l</sup> studied the effect of cognitive processes on learning. They highlighted that cognitive learning as a conscious acquisition of knowledge and an observed learning as a response to a stimulus.

Huber (1991)<sup>li</sup> suggested that information is the primary element in organizational learning and yet it should be sent out commonly to improve the learning process.

Garvin (1993)<sup>lii</sup> thought both cognitive and behavioral components helps in learning procedure.

Nonaka and Takeuchi (1995)<sup>liii</sup> highlighted that learning will happens in an intellectual space.

Crossan, et al (1999)<sup>liv</sup>, Popper and Lipshitz (2000)<sup>lv</sup>, highlighted the Knowledge at all levels is held in different places and with different people. New knowledge in an organisation is produced when a new idea or plan occurs to an individual and is passed on to others and combined with the organisations knowledge. Social interaction in throughout the process combines various knowledge sources and allows its internalization by the individual and the organisation.

### **2.13 Knowledge Management Paradigms:**

Grant (1996)<sup>lvi</sup> highlighted the idea of a people oriented view point of KM, it is the idea that people in groups have knowledge that should be transferred to the organization and also to the group.

Stenmark (2001)<sup>lvii</sup> identified that Knowledge Management is the collective learning process which take place at various levels of the company.

Easterby-Smith, Lyles (2003)<sup>lviii</sup> and Ryan et, al (2010)<sup>lix</sup> stated that the development of the KM field over the last decade has been characterized as „rapid and chaotic“. Indeed, there are a large variety of themes in the KM literature including the dynamic of expertise, information management, information technology, people management (knowledge roles, knowledge workers), knowledge creation, knowledge sharing, transfer of learning, intellectual capital, tacit knowledge and so on, Hazlett, McAdam, and Gallagher(2005)<sup>lx</sup> have highlighted that despite the diverse array of different interests and perspectives, it is possible to discern two distinct thrusts or paradigms within the KM field: the computational or technological paradigm, and the socio-organizational paradigm “There is an agreement that three major paradigms of knowledge management exist:

- a. information technology paradigm,
- b. humanist paradigm; and
- c. holistic approach paradigm”,

Maier (2002)<sup>lxi</sup>, Gloet and Berrell (2003)<sup>lxii</sup> highlighted IT paradigm concentrates on facts and technology as the key resources to allow for the data management process. It concentrates on the tangible factors of knowledge management. So, problems of technology program equipment, hardware and software systems have become the primary issues. However, KM (Knowledge Management) is viewed as being a hostile of processing information for several company pursuits which make sure obtaining the correct information on the best person in the appropriate time and that will be the Humanist Paradigm.KM is conceptualized as procedure for building, combining and transferring private information within the group to push for organizational awareness that's a supply of competitive advantage.

The humanist paradigm mostly focuses on human element and it is even more interested with tacit types of knowledge as well as things impacting the man behavior and learning like organizational culture, leadership and structure. There's an increasing recognition of the job of individuals in the data management process along with an expanding interest in the viewpoint of knowledge of organizations.

Greiner et al. (2007)<sup>lxiii</sup> highlighted that „The implementation of Knowledge Management techniques comprises mostly people oriented, technological and organizational tools which are ideal for dynamically optimizing the organization wide amount of learning ability, education, and competencies of the users, and also for building collective organizational intelligence'

## **2.14 Knowledge Management Process:**

Kolb (1984)<sup>lxiv</sup> highlighted the experiential learning cycle. It consists of experiencing, observation, conceptualization, and experimentation. Walsh and Ungson (1991)<sup>lxv</sup> divided organizational memory process into acquisition, retention, and retrieval.

Stein and Zwass (1995)<sup>lxvi</sup> suggested KM process which are made up of knowledge acquisition, search, maintenance, retention and retrieval.

Nevis et al (1995)<sup>lxvii</sup> stated the KM into acquisition, utilization, and sharing. Knowledge acquisition is going to be the improvement or creation of skills. Knowledge utilization is the integration of mastering so it's broadly accessible and in addition might be generalized to new instances.

Arthur Anderson and APQC (1996)<sup>lxviii</sup> proposed the Knowledge management process to build the tacit knowledge and permits it is being in explicit knowledge inside the business. So he defines the Knowledge Management procedure includes using, creating, identifying, collecting, adapting and organizing.

Spender (1996)<sup>lxix</sup> described the KM processes as knowledge creation, transfer and application.

Szulanski (1996)<sup>lxx</sup> focused on knowledge transfer process, which is composed of initiation, implementation and integration.

DeLong (1997)<sup>lxxi</sup> studied that KM process will consists of Capturing, transferring plus application of knowledge had been considered.

Ruggles (1997)<sup>lxxii</sup> proposed generation, codification, and transfer. Knowledge generation includes all activities which bring to light the knowledge which is new, whether to the individual, to the group, or to the world.

Spek and Spijervet (1997)<sup>lxxiii</sup> divided KM process into developing, distributing, combining, holding operations.

Arthur D Little (1998)<sup>lxxiv</sup> proposed knowledge management tasks are acquisition, Developing, disseminating, saving and use.

Delphi (1998)<sup>lxxv</sup> proposed 4 key know-how management processes such as “Capturing is connected to obtaining external knowledge and creating knowledge by research or experience, Sharing is making organization to access knowledge at any place and any time. Leveraging is concerned with conversion knowledge into product or service. In Storage process, knowledge is embedded in product to increase value.”

Schuppel et al (1998)<sup>lxxvi</sup> suggested 4 knowledge management tasks which are made up of Creation, Transfer and Acquisition and Development.

Arthur D Little (1998)<sup>lxxvii</sup> proposed knowledge management tasks are Creation, Development, Acquisition, Storing, Disseminating and Use.

Delphi (1998)<sup>lxxviii</sup> proposed four key knowledge management processes. Capturing is related to obtaining external knowledge and creating knowledge by research or experience. Sharing is making organization to access knowledge in any time and any place. Leveraging is concerned with conversion knowledge into product or service. In Knowledge Storage process, knowledge is embedded in product to increase value.

Windhaven (1998)<sup>lxxix</sup> proposed organizational mind tasks that are comprised of acquisition, maintenance, search, retention, and dissemination

Ernst and Young (1998)<sup>lxxx</sup> provided 4 knowledge management tasks that is was comprised of preparation, applying, acquiring, and evaluating.

Jang and Lee (1998)<sup>lxxxii</sup> proposed knowledge development procedure. It was comprised of knowledge acquisition, problem-solving, problem analysis, knowledge embedding, knowledge retrieval, knowledge codification.

Probest (1998)<sup>lxxxiii</sup> suggested 8 building blocks that are made up of knowledge goal, use, preservation, distribution, development, acquisition, identification, and measurement.

Gupta et al researches (2000)<sup>lxxxiii</sup> presented far more detailed know-how management processes. KM associated with Dissemination, retrieval, storage, and Development of knowledge and information inside an organisation. They claimed that KM procedures include knowledge Identification, dissemination, sharing, development, capture, and storage.

Alavi and Leidner (2001)<sup>lxxxiv</sup> examined different characteristics, provided models for KM processes and introduced four steps as creation, storage/retrieval, transfer and application.

Lee and Kim (2001)<sup>lxxxv</sup> proposed that 3 knowledge management processes; reconfiguration, integration, and accumulation. The accumulation of knowledge is possible from the acquisition of knowledge out of inner creation and external sources.

Bhatt (2001)<sup>lxxxvi</sup>, Alavi and Leidner (2001)<sup>lxxxvii</sup>, Moteleb and Woodman, (2007)<sup>lxxxviii</sup> highlighted that there's an agreement amongst researchers on the procedure of knowledge management in literature. They highlighted the knowledge management as being an approach of development (generation, or acquisition, or identification), storage (codification), transfer (dissemination, or sharing, or distribution), utilization (application, validation). Hence, Knowledge management procedure is definitely the center of knowledge control.

Gottschalk (2002)<sup>lxxxix</sup> defined KM from process perspective as procedure for applying, creating, distributing, sharing and also knowing the expertise of a company.

Walters (2002)<sup>xc</sup> defined Knowledge management is the organizational capacity which identifies, locates (creates as well as acquires), transfers, converts and in addition distributes info into naturally competitive advantage.

The Process of knowledge creation, acquisition and sharing is to advance the performance success and competitive advantage of a company. It is obvious the word KM is used for many pursuits designed to administer, produce, improve and boost the worth in addition to worthiness of intellectual energy sources inside a business, and unsurprisingly there hardly any unanimity on the significance in addition to reason of knowledge management.

Darroch (2003)<sup>xcii</sup> stated that KM procedure consists of creation, sharing, distribution and make use of the knowledge in the business.

Lawson (2003)<sup>xciii</sup> provided a unit that was comprised of 6 KM tasks that are “knowledge creation, capture, organization, storage, dissemination and application”.

KM is a process of generation, storage and sharing valuable information and views within and among societies and organizations with similar interests and needs.

Yang and Wan (2004)<sup>xciiii</sup> stated a considerable view of the thought of KM that seems to identify the treatments involved. They determined KM as the process of collecting and seeing info that's useful (i.e. Knowledge acquisition), transferring tacit knowledge to explicit awareness (i.e.; know-how growth or even might be transfer), keeping the information in the repository (i.e.; organizational memory), disseminating it all through the whole organisation (i.e., knowledge sharing), enabling personnel to rapidly retrieve it (i.e.; knowledge retrieval) and exploiting and usefully utilizing expertise (i.e.; know how leverage).

Supyuenyong et al (2009)<sup>xcv</sup> identified 4 major KM procedures bundled of expertise acquisition as well as knowledge utilization, knowledge dissemination, knowledge retention and knowledge creation.

Barratt-Pugh et al (2011)<sup>xcv</sup> highlighted that Knowledge management has emerged as brand new method which investigates how you can obtain knowledge for the upcoming profitability of the business, application and dissemination of new knowledge for the next generation.

Zaim et al, (2013)<sup>xcvi</sup> proposed that it's feasible to create a far more extensive process oriented perspective of KM. He mentioned that: KM is the systematic management of all the processes and activities known to advancement and development, storage and codification, transferring and sharing, then utilization of knowledge for an organization's competitive advantage. In reality, scientists differ in terminology of the appreciation of theirs of KM procedures and various investigations have used many tasks of KM

### **2.14.1 Knowledge Creation Process:**

Nelson and winter (1982)<sup>xcvii</sup>, Teece (1977)<sup>xcviii</sup> and winter (1987)<sup>xcix</sup> mentioned that tacit knowledge is tough to understand for imitation in the competition. Nevertheless, the knowledge transformation entails a paradox: in the event that tacit knowledge comprises the primary competitive advantage, subsequently the conversion of it into explicit knowledge, that could be copied, leads predictably to loss of competitive benefit.

Nonaka and Takeuchi's (1995)<sup>c</sup> highlighted the idea of knowledge creation where human awareness is produced as well as enhanced via social interaction among tacit and also explicit knowledge. They argues the process of change from explicit expertise to tacit understanding might be bidirectional and spiral. Appropriately, they posit that tacit knowledge could be expressed and also, consequently, transferred between people. According to this presumption, they postulate 4 modes of Knowledge creation process underneath the acronym SECI: Socialization (tacit-tacit), Externalization (tacit - explicit),

Combination (explicit - explicit) and Internalization (explicit - tacit).The model aims at giving an informative view of knowledge of organisations by acknowledging the deep and long procedures by what crystallized propositions (i.e., explicit knowledge) are originated in and also affected by pre theoretical awareness (i.e., tacit knowledge).

Significantly, the 4 tasks which create the SECI framework underline which knowledge creation is profoundly rooted in, and also affected by, the quality of social interaction among, organizational users. They suggests, knowledge creation is an interpersonal practice involving people and not confined to the person. Specific emphasis has been put on the tacit knowledge that workers possess. Subsequently, organizational users internalize the newly created complicated set of explicit knowledge via action and application. Nevertheless, several scientists classify knowledge differently.

Scarborough (1998)<sup>ci</sup> proposed that Social systems generate knowledge through collaborative interactions and joint problem solving. These systems points to the weak epistemological basis of the knowledge conversion assumption which, in turn, has led to much confusion in KM theory and practice. He adds that this confusion, which has contributed to the fad-like qualities of the KM field, has resulted in many organisations equating the presence of an ICT system with a KM system. The focus placed on ICT systems that seek to capture tacit knowledge and convert it into explicit knowledge has been characterized as the „IT trap“. Nonaka et al., (2000)<sup>cii</sup> mentioned that Knowledge development represents the improvement of innovative organizational capability and expertise Knowledge originates within people or maybe interpersonal systems. At the unique level, knowledge is produced through cognitive processes including learning.



McInerney (2002)<sup>ciii</sup> proposed that through collaborative and social procedures in addition to individual's cognitive tasks, knowledge is produced, enlarged, amplified, shared, and justified in an organizational environment.

Lee and Choi (2003)<sup>civ</sup>, in a survey of Japanese small and medium enterprises, they learned that a balance of SECI modes correlated with the improved level of financial performance.

Consequently, in current day business atmosphere with its frequently velocity of change, the advertising of knowledge creation process conveyed by the SECI mode is an important way for creating knowledge and thus innovation, for enhanced obviously creates competitive advantage.

According to Andreeva and Kianto (2011)<sup>cv</sup> highlights that knowledge creation process consists of intra organizational knowledge sharing and application, external knowledge acquisition, and knowledge storage and documentation.

#### **2.14.2 Knowledge Transfer Process:**

According to Singley and Anderson (1989)<sup>cvi</sup>, knowledge transfer is known at the solo level as „how knowledge acquired in one situation applies (or fails to apply) to another“.

Dierickx and Cool (1989)<sup>cvi</sup> claim that a firm's built up talent, expertise, and skills may be considered expertise stocks. In comparison, expertise flows add the transfer of new information across organizational boundaries and the transfer of underutilized information within organizational boundaries.

Nonaka (1991)<sup>cvi</sup> argues that tacit knowledge is much harder to transmit than explicit knowledge.

Zander and Kogut's (1995)<sup>cix</sup> field research on the transfer of manufacturing capabilities in Swedish based firms says that transferring codified knowledge is significantly less difficult than transferring non-codified knowledge.

Grant (1996)<sup>cx</sup> highlights the knowledge transfer implications of explicit and also tacit knowledge: Explicit KM transfer is shown by interaction of its. Tacit knowledge is revealed through its implementation.

*Teece et al* (1997)<sup>cx</sup> highlighted that while knowledge stocks provision for a firm's core competencies .Knowledge flows are vital for the refinement, modification, renewal ,expansion and provisioning knowledge stocks.

The performance benefits of knowledge transfer have been documented in the manufacturing sector by Galbraith(1990)<sup>cxii</sup> .In the service sectors and at Inter organization level , Knowledge management transfer is given by Baum and Ingram(1998)<sup>cxiii</sup>, at intra-organizational by Epple, Argote and Murphy, (1996)<sup>cxiv</sup> and interorganisational levels by Dyer et., al , (1998)<sup>cxv</sup>.

Similarly, Hansen's (1999)<sup>cxvi</sup> report reveals that US based Multinational companies research intensive firm discovered the transfer of non-codified knowledge amongst R and D subunits was slower when compared with codified knowledge.

Alavi and Leidner (1999)<sup>cxvii</sup> highlighted the Knowledge transfer enables knowledge to be accessed beyond the originating person or department to locations in the organization, where it is required and can be used.

Argote and Ingram (2000)<sup>cxviii</sup> stated that stated that „Knowledge transfer of organisations could be defined at several analytical levels. It is the procedure through which one product (e.g., division), department, or group is influenced by the knowledge of another' this definition concurs with expertise transfer in the private level of analysis which are discovered in the spot of cognitive psychology. Organizational knowledge resides in several repositories, like projects, individuals and programs. Its people embodied awareness that constitutes the foundation in which rests the improvement of a firm's compelling abilities and consequently the intellectual capital advantage. They incorporates the data as action orientated and the data utilization and acquisition. Because of this, knowledge transfer denotes a procedure which includes both behavioral and cognitive areas which results to learning.

Argote et al (2000)<sup>cxix</sup> argued the knowledge transfer system consists of the transmission of knowledge from the original location to exactly where it's required as well as is used. It's viewed as a crucial facet of knowledge control.

Adler (2001)<sup>cxx</sup>; Adler and Heckscher (2006)<sup>cxxi</sup> highlighted the inclusion of trust as a fundamental mechanism for coordinating knowledge processes adds significantly to understanding the motivational assumptions underlying the effective transfer of knowledge.

### **2.14.3 Knowledge Storage Process:**

Davenport and Prusak (1998)<sup>cxiii</sup> mentioned that stated that Knowledge storage is a helpful exercise as it stimulates knowledge re use as well as prevents companies from getting to reinvent the wheel as an outcome of misplaced or even unavailable awareness, thus saving cash, additional internet resources as well as time (Knowledge storage or even codified consent refers to the development of organizational awareness). Ruggles (1998)<sup>cxiii</sup> stated that knowledge storage is the representation as well as capture of expertise, therefore it could be re-used possibly by a person or perhaps by an organisation. He highlighted 2 kinds of organizational memory: external and internal. Internal memory represents the stocks of information that reside within groups or individuals of people in a company. It is composed of individual's organizational culture as we as abilities. External memory represents the knowledge which has codified and explicitly induced in organizational databases. He mentioned Storage and knowledge retrieval seek to overcome the problem of expertise loss via worker departure, by capturing and saving information therefore it survives the knower, and also might be retrieved easily and efficiently. This particular treatment involves organizing, determining and accessing associated information from the organization's mind, which might stay in the type of written information, organizational methods and structured information.

#### **2.14.4 Knowledge Utilization Process:**

Holsapple (1999)<sup>cxxiv</sup> highlighted the knowledge utilization process as an exercise of manipulating existing knowledge to make knowledge.

He also describes the usage of knowledge for decision making as well as problem solving by groups and people within groups through this procedure, knowledge gains worth in the eye of the recipient.

#### **2.15 Knowledge Management Enablers:**

Walsh and Ungson (1991)<sup>cxxv</sup> considered knowledge management influencing factors as individual, culture, transformation, structure, ecology, and external archives.

Leonard-Barton (1995)<sup>cxxvi</sup> suggested strategic intent, core capability, creativity, continuous experimentation, information and cognitive variety are influencing factors of KM.

Nevis et al (1995)<sup>cxxvii</sup> proposed 10 facilitating KM enablers those are comprised of scanning imperative, performance gap, concern for measurement, experiential mind set, climate of openness, involved leadership, multiple advocates, operational variety, continuous education, and method perspective.

Nonaka and Takeuchi (1995)<sup>cxxviii</sup> proposed creative chaos, fluctuation, autonomy, and organizational intention, info redundancy, along with requisite variety are the enablers of KM.

Pentland (1995)<sup>cxxix</sup> emphasized social interaction as key enabler of KM.

A number of knowledge management enablers are tackled in the literature by Ichijo et al, (1998)<sup>cxxx</sup>, Leonard-Barton (1995)<sup>cxxxi</sup>, Sawhney and Prandelli (2000)<sup>cxxxii</sup>. Among these they highlighted the key enablers are organizational culture, structure, people, and information technology are incorporated into our research model.

Wiig (1995)<sup>cxxxiii</sup> identified impact list for KM influencing factors which are consist of tasks/processes, people, structure, and power.

Arthur Anderson and APQC (1996)<sup>cxxxiv</sup> stressed the organizational culture, information technology, strategy, knowledge management process, knowledge evaluation and leadership are the key enablers.

Szulanski (1996)<sup>cxxxv</sup> emphasized the critical success factors of KM are knowledge content, source and recipient, and context as influencing factors.

Demarest (1997)<sup>cxxxvi</sup> divided enablers into culture infrastructure, operational infrastructure, and technical infrastructure.

Spek and Spijervet (1997)<sup>cxxxvii</sup> identified four influencing factors which are of personnel, information technology, management and culture and motivation.

Arthur D Little (1998)<sup>cxxxviii</sup> emphasized organizational culture, information technology, strategy, knowledge management process, and knowledge content are key knowledge enablers.

Delphi (1998)<sup>cxxxix</sup> emphasized organizational culture, information technology, strategy, and knowledge management process are enablers of KM.

Ernst and Young (1998)<sup>cxl</sup> emphasized organizational culture, information technology, strategy, knowledge management process, and knowledge content.

KPMG (1998)<sup>cxli</sup> emphasized organizational culture, information technology, strategy, and knowledge management process.

Pan and Scarbrough (1998)<sup>cxlii</sup> identified six enablers which are composed of culture, strategy and leadership, technology, organizational learning, measurement and performance, and knowledge entrepreneurship.

Probst (1998)<sup>cxliii</sup> proposed three KM influencing factors such as top management support, organizational structure, and culture.

Davenport et al (1998)<sup>cxliv</sup>, Demarest (1997)<sup>cxlv</sup> and Gold et al (2001)<sup>cxlvi</sup> highlighted that Organizational culture is crucial for effective information management.

A survey by Chase (1998)<sup>cxlvii</sup> indicates that 80 percent of the people who participated in the survey recognize that culture is the most important factor for creating a knowledge-based organization.

An important component of knowledge management research is to identify enablers of knowledge management.

Wijnhoven (1998)<sup>cxlviii</sup> proposed individuals, culture, transformation, structure, ecology, external archives, and system as knowledge management factors.

Lee and Kim (2001)<sup>cxlix</sup> proposed the key enablers of KM are knowledge workers, knowledge management processes, and information technology.

Wong (2005)<sup>cl</sup> highlighted the knowledge management enablers as motivation aids, training, HRM, culture, management leadership, IT and organizational structure.

Bishop (2008)<sup>cli</sup> mentioned that top level support, reward, IT are the key enablers of knowledge management

King (2008)<sup>clii</sup> identified that Group dynamics, organizational culture, organizational climate are the key enablers of KM.

De Jong et al (2016)<sup>cliii</sup> stated the important KM enablers as trust, people needed for organizational performance.

Maha Alkhaffaf, Monira Muflih and Mahmoud Al-Dalahmeh (2018)<sup>cliv</sup> recommended that knowledge management enablers are Information Technology, people, structure, and culture.

### **2.15.1 Organizational Culture:**

Denison (1984)<sup>clv</sup> highlighted that learning organizational culture, involves the key components are Mission, Adaptability, Consistency, and Involvement are provided by the involvement equips the group with many viewpoints in decision making. It makes a feeling of responsibility and ownership, increases employee's commitment and therefore betters ingenuity and innovation. The Consistency trait can also be regarded as vital for achieving inner integration based upon the power of its to facilitate the control of recreation additionally stated that in order to study organizational culture, we use Denison model.

In this model, culture elements include Involvement, Consistency, Adaptability and Mission was given by *Involvement* equips the organization with multiple viewpoints in decision making. It creates a sense of ownership and responsibility, increases employee's commitment and hence improves innovation and creativity.

Businesses which appreciate unique power, working cooperatively toward ordinary objectives, and also produce employee's ability, are theorized to mark on top of this particular trait. The Consistency trait can also be regarded as vital for achieving inner integration based upon the power of its to facilitate the control of recreation additionally suggest by Ergun as well as Yilmaz, (2008). This trait creates a feeling of identity and an obvious range of expectations previously stated by Denison (1984).

Huber (1991)<sup>clvi</sup> argues that consistency allows a company to understand information that is new across devices. Culture will undoubtedly improve the amount of teamwork, sharing of openness and knowledge to brand new ideas among employees.

Long (1997)<sup>clvii</sup> highlights the Culture describes not just what expertise is valuable, but additionally what understanding should be placed within the group for suffered revolutionary benefit.

Davenport and Prusak's (1998)<sup>clviii</sup> describes the knowledge oriented society, hinting that organizational society in terminology of the openness of theirs plus bureaucratic characteristics, as communication, and therefore knowledge sharing, will be influenced considerably by this particular spectrum from open/free correspondence to closed/formal interaction.

Krogh (1998)<sup>clix</sup> highlighted that Care is a key enabler for organizational relationships Care characterizes interactions between receivers and providers in organizations and should be understood as a quality of relationship rather than in terms of roles and functions also proposed by Ichijo et al (1998)<sup>clx</sup>.

Ramuset. al (2000)<sup>clxi</sup> mentioned that every single company conjures as well as provides its own distinctive important culture, which predictably contains values, norms, attitudes as well as behaviour which characterized the daily functioning of an organization. The organisations concentrate on learning, trust, and collaboration on the foundation on the idea of therapy. They discovered that organizational cultural values including customer orientation, service quality, informality as well as originality were significantly linked with marketing success.

Ndlela and Toit (2001)<sup>clxii</sup> indicates that in case of knowledge management it is usually to be an integrated part of exactly how job gets completed in a company, it should be an integrated element of the lifestyle Extensive investigations on organizational culture suggest good connection between tradition as well as knowledge management. The first factor, organizational culture, is described as a system of shared meaning held by organizational members that distinguishes one organization from another, Schein (2004)<sup>clxiii</sup>. This system of shared meaning allows members to understand the context and underlying meaning of the knowledge being shared. A Culture that acknowledges the importance of sharing knowledge amongst organizations is in fact important and should therefore be crucially considered especially when implementing KM.

Wong et. al (2005)<sup>clxiv</sup> highlighted that the significance of a culture is recognized as a major contributor to KM as it represents a major source of competitive advantage for organizations especially SMEs in improving their business performance, thereby increasing innovation, creativity and providing more opportunities for SMEs to compete. Ho (2008)<sup>clxv</sup> examined that organizational culture will determine, to a large extent, how members interact with one another. In the context of knowledge management is considered a complex collection of values, beliefs, behaviors and symbols that influences knowledge management in organizations more recently, several authors also showed that various cultural dimensions were related to organizational performance.

Nejatian et al (2013)<sup>clxvi</sup> argued that “culture provides the basic infrastructure environment where individuals openly share their knowledge.

Collaboration represents a key factor for Knowledge Creation Process success was given by Gururajan and Hafeez-baig (2012)<sup>clxxviii</sup>, Nejatian et al.,(2013)<sup>clxxix</sup> also highlighted that knowledge exchange “ can be fostered by collaborative interactions to reduce fear and increase openness to other members”

Sorensen and Stanton (2016)<sup>clxxx</sup> mentioned about teams performance and collaboration re positively related with each other.

### **2.15.2 Trust:**

Kreitner and Kinicki (1992)<sup>clxxxi</sup> stated that Trust can be defined as maintaining reciprocal faith in each other in terms of intention and behaviors Trust is critical in a cross-functional or inter-organizational team because withholding information because of a lack of trust can be especially harmful to knowledge articulation, internalization, and reflection was proposed by Hedlund (1994)<sup>clxxxii</sup>.

Trust may facilitate open, substantive, and influential information exchange was recommended by Nelson and Coop rider (1996)<sup>clxxxiii</sup> O'Dell and Grayson, (1999)<sup>clxxxiv</sup>. The investment of trust among organizational members can be thought of as a leap of knowledge transfer.

Szulanski (1996)<sup>clxxxv</sup> empirically found that the lack of trust among employees is one of the key barriers against knowledge transfer. When their relationships are high in trust, people are more willing to participate in knowledge exchange and social interactions. People seek advice from trusted colleagues to sharpen their understanding of the problems. The increase in knowledge transfer brought on by mutual trust results in knowledge creation.

Scott, (2000)<sup>clxxxvi</sup> identified that facilitating trust among cross-functional or interorganisational team members is important for the foundation of knowledge creation.

De. Jong et. al (2016)<sup>clxxxvi</sup> highlighted the benefits of trust as a vital knowledge management enabler .

### **2.15.3 People or T-Shaped Skills:**

Leonard-Barton (1995)<sup>clxxxviii</sup> highlighted that people mentioned that T shaped skills embodied in personnel are usually connected with primary capability T shaped abilities imply that abilities are both rich (the vertical portion of the T) as well as large (the horizontal element of the T). The skills embodied in employees are the dimension most often associated with knowledge management. People with T-shaped skills are extremely valuable for creating knowledge because they can integrate diverse knowledge sets.

Madhavan and Grover (1998)<sup>clxxxix</sup> highlighted that T-shaped skills imply that the capability of individual specialists allows them to have meaningful and synergistic conversations with one another. They argued that the horizontal stroke of the T- shaped skills set enables organizational members to meaningfully interact with one another; without these skills, such interaction would be hampered.

Chase (1998)<sup>cx</sup> highlighted that People are at the heart of creating organizational knowledge.

Little and Deokar (2016)<sup>cxci</sup> stated that the interaction between T-shaped skills and Information technology are the key enablers for knowledge creation.

Tomenendal, Raffer, Stockklauser, and Kirch (2017)<sup>cxcii</sup> stated that people with T- shaped skills are needed for goals achievement.

### **2.15.4 Transformational Leadership:**

Katz et al (1978)<sup>cxci</sup> highlighted the link between Leadership and Knowledge Management and may be identified on 2 well studied types of leadership: achievement oriented leadership and people oriented leadership. Achievement oriented leadership stresses scans and

consequently could be much less supportive of long-range KM behaviour, while individuals oriented leadership spotlights procedures because of team as well as subordinates' idiosyncrasies and might consequently motivate expertise sharing involving people.

Macinnis and Jaworski (1989)<sup>cxci</sup> stated that the leadership has proven the degree to which people process info is a characteristic of motivation, ability, and opportunity. Nevertheless, leadership could significantly impact the initial 2 variables of inspiration, a pressure which directs people toward targets, and chance, the degree to which an issue is favorable to attaining a preferred outcome. Thus a leader like the supervisor will be able to affect his or maybe the employees of her to achieve the goals of theirs and directs the enterprise in ways that makes it much more cohesive and coherent in acquiring the desired organizational outcomes.

A good leader capitalizes on workers strengths by making efficient choices and also responds promptly to changing conditions consequently, the support and commitment provided by leaders should be ongoing in improving an enterprise business performance in contributing towards the success of KM, eventually making leadership a critical factor in supporting the KM initiative members. This construct is in agreement with Davenport and Prusak's (1998)<sup>cxci</sup>. Senior management support is a key entity for knowledge management initiative. By this definition, we can see that leadership is an organizational driver, arguably the most important one, which defines first the vision and values that organizations seek, and second how organizational members go about realizing these.

As knowledge is created in the pursuit of organizational goals, leadership will determine what kind of knowledge is sought and created by members. In essence, it is this leadership support that enables KM to be implemented in organizations all over.

Singh (1998)<sup>cxci</sup> states that the benefits of leadership shouldn't be taken lightly particularly the properly sought after leadership styles, in ensuring that KM procedures runs smoothly. Leaders are crucial in acting as role models to exemplify the preferred behavior for KM.

Holsapple and Joshi (2000)<sup>cxci</sup> mentioned that Management leadership plays a vital part in influencing the achievements of KM. The last enabling element, leadership, is described as the procedure of influencing others to understand as well as agree about what must be completed and the way to do it as well as the procedure for facilitating collective and individual initiatives to attain shared objectives'.

### **2.15.5 Information Technology:**

Leonard-Barton (1995)<sup>cxci</sup>, Dutta et al.'s (1997)<sup>cxci</sup> highlighted that Information technologies within an organization determine how knowledge is used and accessed highlighted the importance of knowledge in terms of conceptualization of systems that automate, information and stimulate.

Borghoff and Pareschi, (1997)<sup>cc</sup> stated that investments in information technology seem to be unavoidable to scale up knowledge management projects



Some leading theorists have warned about strong investments in information technology, possibly at the expense of investments in human capital (Sveiby, 1997)<sup>cci</sup>. Sophisticated knowledge management systems pay off because of their ability to reuse knowledge.

The technological infrastructure includes information technology and its capabilities. Among technology related variables, this dissertation focuses on information technology support which was proposed by Stonehouse and Pemberton (1999)<sup>ccii</sup>.

Currently, little empirical research has been conducted on information technology support for knowledge management was suggested by Gottschalk, (2000)<sup>cciii</sup>.

Many researchers have found that information technology is a crucial element for knowledge creation and transfer which was recommend by Gupta and Govindarajan (2000)<sup>cciv</sup>. Today it is not just the management work that is becoming more knowledge intensive but the production work is also becoming knowledge intensive.

IT supports the various processes of knowledge creation, storage/retrieval, transfer and application at an organizational level is dealt with quite extensively by Alavi and Leidner (2001)<sup>ccv</sup>. They suggest that as information exposure increases through intranets and other computer networks, individuals may create greater knowledge.

Gold et al., (2001)<sup>ccvi</sup> highlighted that Information technology (IT) is commonly used to link people who have multiple-user and codified expertise, and also it helps with interactions. Through the linkage of information technology in a company, before fragmented flows of understanding may be incorporated.

Ndlela and Toit (2001)<sup>ccvii</sup> stated that Information Technology helps employees to have easy access to the required knowledge. Second, a well-developed technology integrates fragmented flows of information and knowledge was proposed by Gold et al., (2001)<sup>ccviii</sup>.

This integration can eliminate barriers to communication among departments in organization. Information technology upholds collaborative works, communication, searching and accessing, and systematic storing.

Grover and Davenport (2001)<sup>ccix</sup> highlighted how the ICT (Information and Communication Technology) is evolved in business to the point where it generated interest in managing knowledge.

According to Wong et. al (2005)<sup>ccx</sup>, for applying Knowledge Management, ICT is a vital enabler that supports Intranet and Internet personnel with essential understanding is often determined as well as attached to one another by sharing essential knowledge.

Inkinen, Kianto, and Vanhala (2015)<sup>ccxi</sup> enhances the IT support directly links with innovation.

Cohen and Olsen (2015)<sup>ccxii</sup> emphasized that IT-support will create learning for knowledge storage which enhances the organizational performance during long run.

### **2.15.6 Human Resource Management Recruitment and Selection:**

Scarborough (1998)<sup>ccxiii</sup> highlighted that KM is often adopted by organisations in complex, unpredictable environments, traditional selection and recruitment practices have more often than not to be modified. They stress a fit between organizational culture and hiring of suitable personalities, as well as the socialization of individuals into the culture of the firm.

Where assessment centers are functionally focused they can strengthen the sub-cultures of functions and make knowledge sharing between functions very difficult. Other studies highlight the importance of a fit between new recruits and the organisation's knowledge culture. Several researchers stated that in firms which adopt the codification strategy, the development of technological solutions are encouraged, particularly in electronic recruitment and psychometric testing.

According to Armstrong (2000)<sup>ccxiv</sup>, HRM can be seen as being an extension of personnel management, that's about obtaining, organising and encouraging the human resources needed by the corporation. He implies the job of HR in the context of mastering KM or businesses, is facilitating the dissemination of understanding through workshops, seminars and tasks and later, to be responsible for coordinating the preparing of business programs which integrated the result of the learning activities.

Soliman and Spooner (2000)<sup>ccv</sup> viewed the role of HR manager is to fill the knowledge gaps between employees.

Ho (2009)<sup>ccvi</sup> stated that Knowledge management (KM) is a strategy for transferring the right knowledge for the best person in proper time.

Migdadi (2009)<sup>ccvii</sup> mentioned about eleven critical success factors of Knowledge Management that are appropriate for SMEs (leadership and support, culture, IT, strategy and purpose, measurement, organizational infrastructure, processes and activities, motivational aids, resources, training and education and human resource management (HRM)).

Currie and Kerrin (2010)<sup>ccviii</sup> argues that organisations need to follow innovative policies for the recruitment.

#### **a. Training and development:**

Argyris's (1996)<sup>ccix</sup> highlights the concept on double and single loop learning, codification method focuses on individual loop learning, while double loop learning is emphasized with personalization technique. Personalization companies hire graduates being inventors, i.e. to make use of their creative and analytical abilities on specific business issues, and also to talk about as well as disseminate understanding.

Hansen et al. (1999)<sup>ccxx</sup> argues, that firms adopting codification strategies tend to hire undergraduates and train them in groups to be implementers, i.e. to emphasize knowledge acquisition, manipulation, and storage, including the focus on technology.

The training and development of employee deals more with knowledge of documentation of processes and procedures, problem solving skills and techniques, and industry and business knowledge. The focus of current training is placed on enhancing employee's basic skills and expertise.

Training is being emphasized in order to give the trainees a complete picture of their future role in the company's operation.

Robertson and O'Malley Hammersley (2000)<sup>ccxxi</sup> stated that in order to stay at the forefront of their professional fields, the people must be constantly aware of developments and inculcating lifelong learning.

Yahya, Lailawati, and Keat (2003)<sup>ccxxii</sup> highlights that Employees must quickly equip themselves with the necessary skills and knowledge that are critical to the attainment of the company's goals.

Little and Deokar (2016)<sup>ccxxiii</sup> highlights that "training and development methods that can enhance our understanding on how knowledge management system tasks are connected".

#### **b. Performance Appraisal:**

Yahya, Lailawati, and Keat (2001)<sup>ccxxiv</sup> highlighted the Compensation system "Reward for measurable competencies" instill the joy of working in employee in performing duties and responsibilities

Finally, Gloet and Berrell (2003)<sup>ccxxv</sup> emphasized that the KM strategies see effort, measurement and rewards differently. As a result, for codification strategy performance appraisal based on technology oriented, whereas for personalization strategy the individuals contribution is the measurement.

Kao and Wu (2016)<sup>ccxxvi</sup> mentioned that training in organizations provides an opportunity which generates knowledge through numerous kinds of specific social interactions that subsumes collaborate, coordinates, and communicates for various purposes.

Salas, Reyes, and Woods (2017)<sup>ccxxvii</sup> stated that teams responded positively when they can assess their performance with standards or target goals.

#### **c. Compensation Reward system:**

Despres and Hiltrop (1995)<sup>ccxxviii</sup> highlighted that compensation and reward methods will be based on profit sharing for group or individual based awards for their effective contribution

Williamson (1996)<sup>ccxxix</sup> highlighted that Compensation and reward systems are regarded as important to elicit individual contribution.

Hansen et al. (1999)<sup>ccxxx</sup> have argued, that the two KM strategies revolved around incentive systems i.e.; either codification or personalization.

Gloet and Berrell (2003)<sup>ccxxxii</sup> highlighted that through codification strategy the efforts of individuals are recognized through technology initiation and their efforts are rewarded, while the personalization paradigm focuses more on people.

Mousavizadeh, Harden, Ryan, and Windsor (2015)<sup>ccxxxiii</sup> highlighted that Effective consistent creation and application of knowledge in an organization is crucial to the success of such organization. In such type of organizations people will be provided with better compensation.

## **2.16 Knowledge Management and Human Resource Management:**

Hansen et al. (1999)<sup>ccxxxiiii</sup> argues that there are essentially 2 techniques for knowledge management. These techniques are codification and personalization of KM. The former describes the codification or explicit knowledge which is objective and formal and could be conveyed in words, specs and figures. This kind of knowledge tends to be kept in databases where it could be accessed as well as used readily by people in the business. This kind of organisations invest seriously in ICT for tasks as intranets, data warehousing and data mining, knowledge mapping (identifying the place that the expertise is situated in the firm) along with electronic libraries. This buildup effectiveness and growth. The re use of knowledge will save effort, reduces communications expenses, and enables an enterprise to have additional projects.

The Second technique described by Hansen et al. (1999)<sup>ccxxxv</sup> to make fit of KM and HRM can be as follows: The personalization strategy of KM will call for various incentive systems. In the codification version, managers have in order to produce a method which encourages individuals to write down whatever they know and to get those documents to the electronic repository. In reality, the amount as well as quality of employees' contributions to the paper database must be a component of the yearly performance evaluations. Incentives to promote knowledge sharing ought to be different at businesses that're adhering to the personalization strategy.

Davenport and D'Neve (2001)<sup>ccxxxvi</sup> highlighted in particular, people and their management are increasingly seen as the key to the success of Knowledge management. The current trend in KM theory, termed by experts as the „second wave’ of KM as proposed by Huysman and de Wit (2004)<sup>ccxxxvii</sup>, KM places more emphasis on the human, social, and cultural parameters of knowledge processes.

Evans (2003)<sup>ccxxxviii</sup> highlighted the core business of the HR is to develop the employees in accordance with the business strategy, select and hire people, train and develop the staff, evaluate their performance, reward them and create a culture of learning.

Hansen (2004)<sup>ccxxxix</sup> highlighted the Personalization which refers to personal development of tacit knowledge based on insights, intuition and personal skills for solving complex problems. Such knowledge is mainly shared through direct person- to-person contacts. Dialogues, storytelling and communities of practice are among the techniques that have to be used in order to facilitate tacit knowledge sharing. It is based on the logic of “expert economics”, i.e. primarily to solve unique problems, where rich, tacit knowledge is needed.

Personalization and explorative learning are closely related, where explorative learning is associated with complex search, basic research, innovation, risk-taking and more relaxed controls. The stress is on flexibility, investment on learning and the creation of new capabilities. The key link identifies between KM and HRM is the competitive strategy of the firm; i.e. it is not knowledge in itself but the way it is applied to strategic objectives is the critical ingredient of competitiveness. This accounts stress on the need for best fit in the HRM practices such as reward systems and an organisation's approach to manage knowledge work.

Svetlik and Stavrou-Costea (2007)<sup>ccxxxix</sup> mentioned that there is a „relationship between KM as well as HRM, HRM is all about controlling folks efficiently. Individuals most precious resource is knowledge. Then KM and HRM comes directly interrelated'. It's essential to accept the connection of controlling and understanding.

It's connected to the tension in between the job of HRM within eliciting individuals abilities, abilities and knowledge (i.e., human capital) and the role of its planning community relations (cultural capital) favorable to the improvement of the data and knowing ability of the firm. It is therefore KM is strongly associated with exploitative learning, which is likely to refine existing technologies and skills, forcing by routinization and standardization.

Ingi Runa Evardsson (2008)<sup>ccxli</sup> stated that Explorative knowledge management strategy plays a tremendous part on Knowledge creation. He states that this technique is going to be utilized for human interaction, innovation and new learning.

Hislop (2013)<sup>ccxlii</sup> argue that through collaborative processes organizations provides the ability to create, sharing and broadening of knowledge. As results, proper HR practices and people's collaboration is the need and survival of any organization

## **2.17 Organizational Creativity:**

Woodman et al., (1993)<sup>ccxliii</sup> highlighted an important intermediate outcome is organizational creativity, which provides a key to the understanding of organizational effectiveness and survival. Organizational creativity is the capability of creating valuable and useful products, services, ideas, procedures or processes by individuals working together in a complex social system.

Organizational creativity transforms knowledge into business value. Neglecting organizational creativity can quickly undermine a business. The relationship between knowledge creation and organizational creativity has received relatively little attention despite its high potential was suggested by Vicari and Troilo (2000)<sup>ccxliv</sup>. Knowledge plays an important role in the ability of the organization to be creative.

Koh (2000)<sup>ccxlv</sup> insisted that organizational creativity and knowledge creation are positively correlated. Naturally, organizational creativity has a strong link with knowledge organizational performance, assessed by the use of global output measures such as market share, profitability, growth rate, innovativeness, successfulness, and the size of business in comparison with key competitors.

According to Choi (2014)<sup>ccxlv</sup> identified that good innovations are services or products which meet industry needs.

Inkinen (2016)<sup>ccxlvii</sup> highlighted the review process and then discovered that utilization of KM methods is considerable printer driver for innovation

## **2.18 Organizational Performance:**

Simon (1991)<sup>ccxlviii</sup> mentioned that Intellectual capital quickly turns into a really important way of measuring the business and highlighted that the intellectual capital is progressively useful to businesses regardless of industrial, age, size, ownership as well as geographical dimensions.

Robinson and Stern (1997)<sup>ccxlix</sup> insisted the physical outcomes of business creativity are the organizational change like improvements (changes to what's currently done innovative developments and) (entirely new tasks because of the company).

Intangible and tangible advantages in addition turn into a helpful method to determine knowledge management outcome.

Quinn et al. (1996)<sup>cccl</sup> argued, in a study of Arthur Anderson Worldwide, that motivated creativity gives more value to a firm by leveraging intellectual assets

Liebowitz and Wilcox (1997)<sup>cccli</sup> equate KM with the organizational ability „to manage, store, value, and distribute knowledge (From a managerial perspective, several countries and their corporations agreed upon a definition of KM as the collection of processes that govern the creation, dissemination and utilization of knowledge to fulfill organizational capabilities“

According to Van der Spek and Spijkervet (1997)<sup>ccclii</sup>, Knowledge Management is described as the explicit management as well as management of knowledge in a company targeted at getting the company's objectives' and a chance to access, expertise, knowledge and knowledge which produce new capabilities, enable better functionality, promote development and also improve consumer value'.

O'Dell et. al (1999)<sup>cccliii</sup> highlighted that Knowledge Management happens to be described as a conscious technique of obtaining the correct information on the best individuals in the perfect time and also assisting individuals share and place info into motion in tactics that attempt improving organizational performance'.

Similarly, others propose that KM can be seen as the procedure of making, capturing, and utilizing expertise to improve organizational performance' indicated by Bassi (1999)<sup>cccliv</sup>. The goal of KM procedure is usually to boost organizational efficiency and competitiveness.

Sawhney and Prandelli (2000)<sup>ccclv</sup> stated that they found a positive relationship between organizational performance and creativity through field study.

Lee and Choi (2003)<sup>cclv</sup> suggested that knowledge management tasks outputs could be knowledge user's capabilities, development and organizational creativity that can easily be regarded as a benefit creator. This particular imagination occurs in interpersonal systems where individuals work.

Lin (2005)<sup>cclvi</sup> stated that the knowledge application is the relevant for organization in terms of value creation. Utilizing knowledge leads to problem solving and improved efficiency.

Liao et. al (2009)<sup>cclvii</sup> studied the performance effects of interaction of KM with HRM control. The findings show that firms emphasizing personalization strategy and HRM behavioral control have a better performance (growth rate, market share, profitability etc.). When codification strategy is used by firms, the combination with output based HRM will improve their performance. No single HRM system is related to firms combining strategies.

Based on Zheng et al, (2010)<sup>cclviii</sup> mentioned that sharing and knowledge development have been discovered contributing to improved performance and innovation. Furthermore, knowledge integration might result in product development, effectiveness, decreased defect density, lowered warranty defects, and improved effectiveness. It reveals that organizational learning created by knowledge management has a good impact on efficiency

Liao et al.(2011)<sup>cclix</sup> stated that mentioned that the ability of using an associated knowledge repository in decision making and problem solving enables the group to react to the environmental modifications much more effectively. Many scientific studies show a tremendous relation between organizational results and knowledge management.

Ho (2009)<sup>cclx</sup>; Liao et al.(2011)<sup>cclxi</sup> recommended that the popular dimensions of organizational performance are profit ratio, revenue growth rate, investment output ratio, and capital return ratio.

Organizational performance is divided into three groups, efficiency, effectiveness and adaptation. First, the rate of market share and rate of sales growth shows efficiency in product development or service. Next, the ratio of output to input resource is called effectiveness, such as the rate of investment to performance. Sales number or sales rate indicates adaptation, which is defined as responsive ability, such as when firms face environmental threats or opportunities as proposed by Chang and Chuang (2011)<sup>cclxii</sup>. Non-financial indicators, such as KM, customer satisfaction are an important topic for enterprises, and the performance evaluation system should be modified accordingly.

A system that only focuses on the financial dimension is obviously unable to reflect organizational operation and resource utilization sufficiently, especially in knowledge-centered organizations was given by Zaied et al., (2012)<sup>cclxiii</sup>.

Chang and Chuang (2011)<sup>cclxiv</sup> Kamhawi (2010)<sup>cclxv</sup> stated that researchers mentioned different dimensions for organizational performance. They argued that organizational performance has 11 dimensions (market share, profitability and growth rate, innovativeness, customer satisfaction, sales growth, efficiency and effectiveness, return on investment, productivity, competitiveness, cost performance).

Steenkamp and Kashyap (2010)<sup>cclxvi</sup>, findings indicated that intangibles are important and are perceived as value drivers of business success. Customer satisfaction was ranked as the most important, followed by customer loyalty, corporate reputation, and product reputation.

Lee and Lan (2011)<sup>cclxvii</sup> to examine the infrastructure and process capabilities of SMEs. A successful KM implementation depends on a harmonious amalgamation of infrastructure and process capabilities, including technology, culture and organizational structure.

Soon and Zainol (2011)<sup>cclxviii</sup> examined the importance of the knowledge creation process, he highlighted that critical success factors of Knowledge management are Learning and T-shaped skills, which are positively related to the knowledge creation process, enhancing, organizational creativity and performance.

Wei, Choy, and Chew (2011)<sup>cclxix</sup> analyzed the implementation of KM tasks within SMEs, and are associated with innovation, improved decision making tasks, competitive advantage, effectiveness as well as product/service quality.

According to Kafetzopoulos and Psomas (2015)<sup>cclxx</sup>, highlights the relationship between innovative dimensions and firm's efficiency.

## **2.19 Conclusion:**

Knowledge is extensively being cited as a strategic advantage for competitive benefit of the organizations. Nevertheless, the development of knowledge is an intricate process which is affected by a few factors outside of the standard exercise of knowledge management (KM). So, this particular study is focused on review of literature that spotlights the dynamics as well as significance of knowledge, properties of knowledge, understanding its role for organizational learning. This chapter highlights the review of literature relating to Knowledge, Knowledge Management enablers and Knowledge Creation process with a focus on the system viewpoint and the relationship to the organization.

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## Chapter 3

### Theoretical Framework

#### 3.1 Introduction:

The idea of knowledge isn't a brand new. It's been the ground for development of culture, religions, philosophies and business. Today people are considering harnessing know-how energies, for better control of fields of their work.

In the realm of understanding economy, the prosperity of any nation depends upon the work force, employability, personal and corporate achievement. It hinges on the people as well as society to recognize the current knowledge, produce new knowledge and make use of the knowledge.

This particular statement can hold great value for the whole planet or a country or its subsets like manufacturing sphere, education sector, etc. To recognize the significance of knowledge, it's essential to learn the underlying conditions accountable for evolution of its process.

Data is the most often recognized, utilized, but least understood in words. Data is nothing but simple descriptions like as name, address, and designation of workers, physical measurements or a University of values including air temperature observations which are captured at a specific period.

Data has a single proper value or a pair not many closely interrelated values. To analyze further process the information, there should be a meaning placed on these values.

A number of authors define "Data is a collection of raw facts which on processing gets information". Information is a crucial resource in the operations of managing organizations.

Timely availability of relevant information is vital for useful functioning of any business. Data consists of information which is various decisions, hence, it is significant to a user.

Information is produced by organizations within certain contexts. Information relates to description, perspective or definition (what, who, when, where).

Knowledge can be described as the interpretation of information which can be readily, organized, and structured for use. In reality, Data as well as information are building blocks for Knowledge. Generation of information is an intermediate stage of knowledge creation process. Knowledge procedure is definitely the intellectual task which is carried out by individuals by acting on information. Knowledge, this particular idea is at times represented as a pyramid (Figure 3.1) as found below:



**Figure 3.1: The Knowledge Pyramid<sup>i</sup>**

Nowadays, knowledge is regarded as an advantage to a company with economic value. Knowledge is differentiated in 2 groups, namely: Tacit knowledge (experiential) as well as Explicit Knowledge (codified or maybe modifiable). Originally, the differentiation of knowledge into these categories was given by Michael Polanyi, a Scientist turned Philosopher in 1966.

His work was carried forward by Ikujiro Nonaka and Hirotaka Takeuchi. Their work was presented in the article in Harvard Business Review in 1991 and later in their book „The Knowledge Creating Company“. In 1994, Peter Drucker noticed knowledge is a primary resource for a society and he believed that the implications of this shift would prove significantly for organizations.

Knowledge is a fluid blend of contextual information, experiences, values, and rules. It is packaged in several types, which includes procedure understanding (how to), catalogue understanding (what is experiential and) awareness (what was). The creation of the knowledge economy, globalization, the growth of technology, the changing needs of advanced buyers, and turbulent competitive location increased strain on organizations.

To tackle these pressures, organizations have to use a policy which respond more quickly to the needs, have flexibility in the dealings of theirs and must have latest technology to draw the attention of customers i.e. in the other words the organizations must possess very best knowledge assets and effective management to deal with these assets.

We've previously discussed in the preceding web pages about the taxonomy Data, Information and Knowledge. Wisdom is described as the supreme level of understanding. It's for the researchers who'd want enhancing the existing exploration for Wisdom.



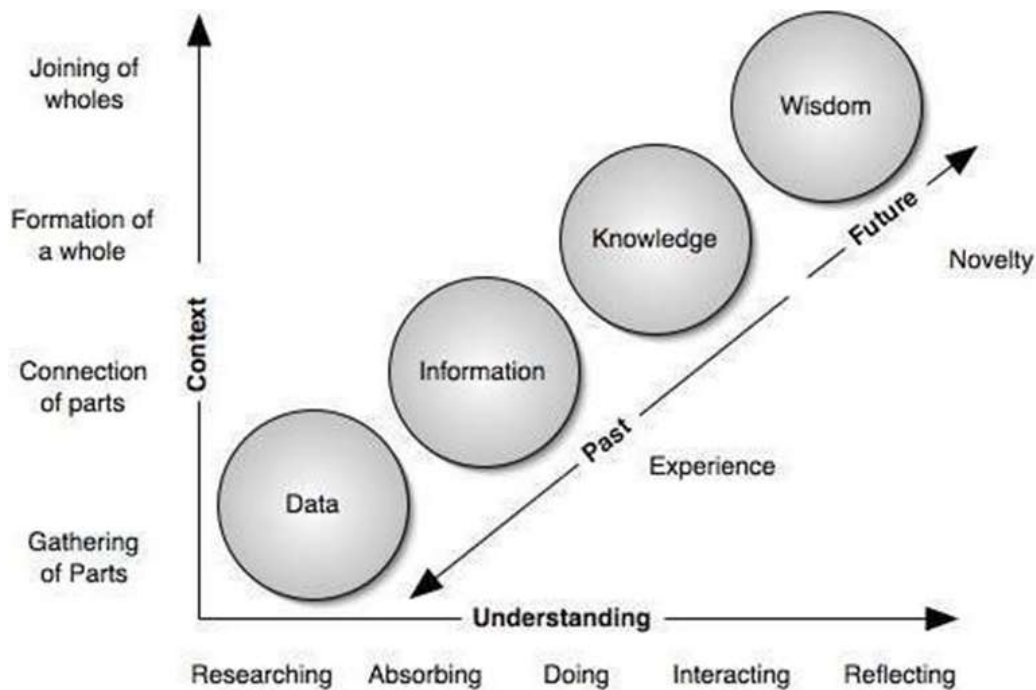


Figure 3.2: The Knowledge Graph<sup>ii</sup>

### 3.2 Basic Types of Knowledge:

#### 3.2.1 Tacit Knowledge:

Tacit Knowledge is an expertise of a person which is unable to articulate. This particular kind of knowledge lies in the brains of the individuals. It consists of 2 components i.e. cognitive element and technical component. Technical component comes from the knowledge of the person and could be demonstrated practically. The cognitive component will be the opinion point of someone, that is extremely hard to express or codify and therefore to talk about. Tacit Knowledge is of 4 types: Embrained (Know what), embodied (know how), embedded, and encultured. Embrained knowledge (Know what) is determined by cognitive capabilities in addition to conceptual capabilities. This particular kind of tacit knowledge could be explicated with relative ease. Embodied knowledge (know how) is an action oriented. It is acquired by performing and grounded in a certain context. This kind of knowledge is tough to explicate. Embedded knowledge resides in the interactions between organizational constituents like technologies, roles, emergent routines and formal procedures. Encultured knowledge and is a shared understanding which is socially constructed and re constructed. Tacit Knowledge is personal awareness embedded in specific encounter and involves intangible elements, like personal beliefs, perspective, and the value system. Tacit Knowledge is tough to articulate with proper language (difficult, though not impossible). It has very subjective insights, instincts, and intuitions. Before tacit knowledge is communicated, it could be changed into words, models or numbers which are understandable. Additionally, you will find 2 dimensions to tacit knowledge: i.e.; Technical and Cognitive dimensions.

Technical Dimension (procedural): This entails the sort of casual abilities usually taken in the word know how. For instance, a craftsperson gets a wealth of expertise following many years of experience. But the craftsperson has difficulty in articulating the scientific or technical principles of his or her craft. It is extremely subjective.

Further, individual insights, inspirations, hunches, and intuitions produced from physical expertise fall into this particular dimension. Cognitive Dimension: This incorporates beliefs, values, ideals, perceptions, psychological models and emotions ingrained. Although they can't be articulated quickly, this particular dimension of tacit understanding shapes how we view the world around us.

### **3.2.2 Explicit Knowledge:**

Explicit Knowledge is the understanding that people are able to exhibit using the language of communication. This particular kind of knowledge could be conveyed in formal language or may be codified. Transfer of Explicit knowledge is extremely straight forward. This kind of knowledge might be quickly shared between varieties of groups/individuals.

As the explicit knowledge could be saved, there are a lesser amount of chances of losing it on account of employee relocation. Therefore we are able to define it as expertise knowledge from one's head into the storable types as newspapers, printed documents, digitized equipment etc.

- **Intuitive Knowledge:** involves immediate and direct recognition of agreement or disagreement of 2 ideas. It yields ideals certainly, but it is rarely offered to us. For instance, we understand intuitively that a dog isn't exactly the same as an elephant.
- **Demonstrative Knowledge:** develops when we perceive the agreement or disagreement indirectly through a number of intermediate ideas. For instance, it is stated that if A is higher compared to B and B is greater compared to C, it demonstrates that the A is greater than C.
- **Sensitive Knowledge:** happens when the sensory strategies of an individual are caused by the presence of an object. No matter we understand what the cause of the thought inside us. For instance, we all recognize that there's a thing producing odor that can be experienced.

### **3.3 Knowledge Typology:**

The data in typology is shown in Figure 3.3, it reveals that facts are changed into information. Consequently it is prepared along with certain context comprises additional information.

By providing significance to information, we receive knowledge that is of two kinds, namely: explicit and tacit. Explicit Knowledge is gathered from concepts, process, principles and procedures whereas tacit knowledge is gathered by experience, very subjective insights and by behavior. Subsequently the procedure of Knowledge conversion happens by using tasks as Socialization, Externalization, Combination and Internalization which leads to understanding that is named as wisdom.

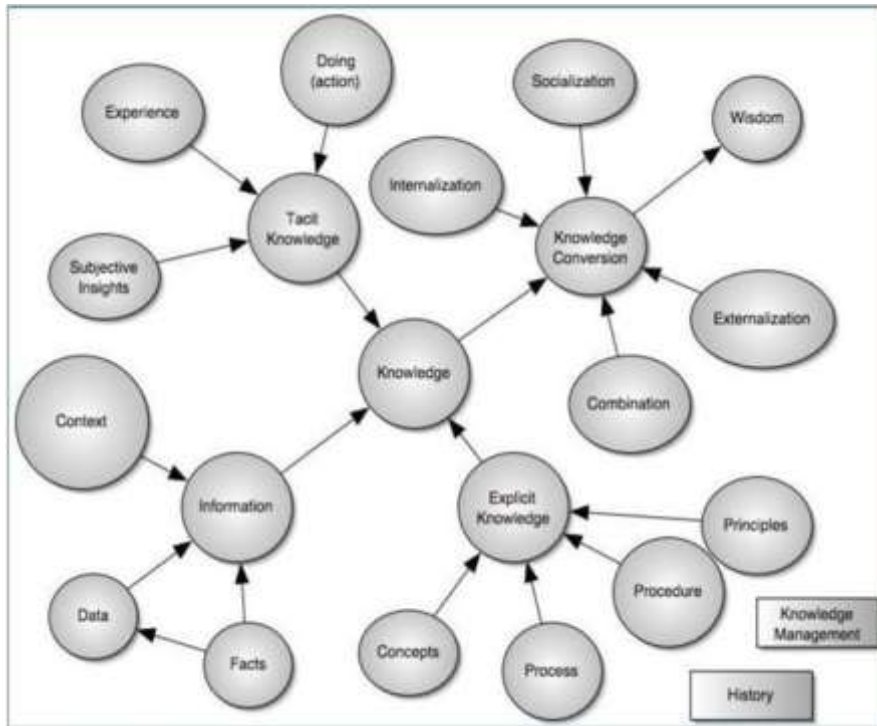


Figure 3.3: The Knowledge Typology<sup>iii</sup>

### 3.4 Organizational Learning:

Organizational Learning in reference to Knowledge Management is described as the procedure of responding proactively and quickly in a demanding environment. It enhances organizational actions through greater understanding knowledge. Organizational Learning could be regarded as the manner in which a company builds supplements, actions and structures of knowledge centering on their core activities within their culture. Organizational Learning contributes to developing, development, sustenance and enhancement of an organizational mind.

### 3.5 Business Intelligence and Knowledge Management:

Knowledge Management is about creating, sharing, and storing, codifying, applying and using knowledge. Thus we are able to state that Knowledge is an entity which links Knowledge Management and Business Intelligence. Human resource for any type of organization is Knowledge Asset for the business. In order to have the knowledge of the business one should study the work culture, resources, stakeholders, different technologies, various processes, etc. This particular knowledge is kept in the minds of theirs in a tacit type. Nevertheless, Knowledge Management will help to make it accessible in the explicit type. In case Knowledge Management and Business Intelligence are incorporated, the result can give better insight to the stakeholders. Different methods to Knowledge Management are attempted by different people/organizations of which technology is popularly used and accepted.

### 3.6 Various Models of Knowledge Management:

#### 3.6.1 SECI Model: (Socialization, Externalization, Combination and Internalization):

Nonaka and Takeuchi Model: Nonaka and Takeuchi (1995)<sup>iv</sup> proposed an unit of the data making procedure. Based on them the knowledge creation system is dynamic in nature, as well as they recommended strategies to control such a procedure efficiently. There's a spiral of knowledge in the place that the explicit and tacit know-how interact with one another in a consistent process which leads to construction of a new knowledge.

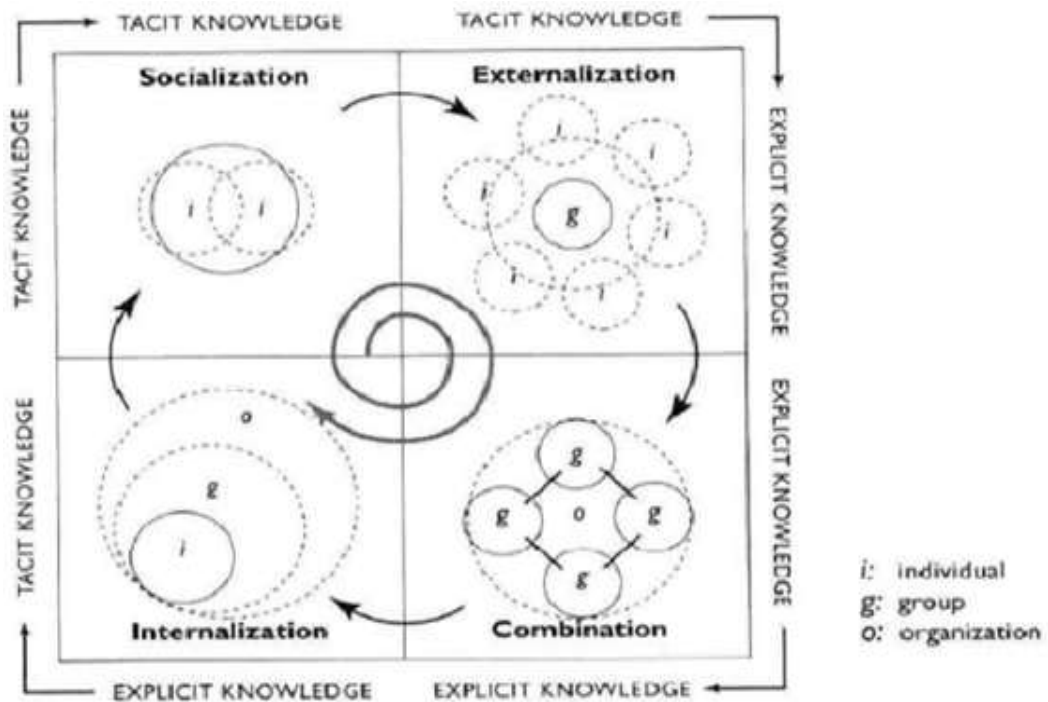


Figure 3.4: Framework of Knowledge Creation<sup>v</sup>

**a. Socialization:** Socialization involves sharing of tacit knowledge in personal communication or by shared experience e.g. teaching the students by practical examples. This particular process is focused on tacit to tacit knowledge linking. Tacit knowledge goes beyond new knowledge along with the boundary is produced by utilizing the procedure of interactions, analyzing, discussing, observing, spending time together or even living in exact same atmosphere. The socialization is likewise known as converting brand new knowledge through experiences that are shared. An Organization gains new knowledge from outside its boundary also like interacting with customers, suppliers and stakeholders.

**b. Externalization:** In this procedure, the tacit knowledge is changed into explicit knowledge by perceptions and by creating models which ought to be in interpretable and understandable form and utilized by others.

New knowledge is produced as tacit knowledge which is out of boundary and becomes collective team knowledge. The knowledge of the individuals doing a job helps in offering quality solutions in the organization.

**c. Combination:** Combination is a procedure wherein understanding transforms from explicit knowledge to explicit knowledge. The finance department records almost all financial reports from each division and also publicizes a consolidated annual financial performance report. Creative utilization of database to produce business report, adding, sorting, categorizing are a few examples of combination procedure.

**d. Internalization:** Internalization suggests understanding the explicit knowledge. It occurs when explicit knowledge transforms to tacit and it turns into a component of individual's primary information. The cycle goes on today in the spiral of knowledge to socialization, when the individual shares his tacit knowledge quietly.

**e. Benefits of the SECI Model:** The positives of the SECI Model appreciates the powerful nature of knowledge and knowledge creation. It offers a framework for management of the appropriate tasks.

**f. Drawbacks of the SECI Model:** It's based on research of Japanese businesses, which heavily depend on tacit knowledge: Workers are usually with an enterprise for life. The linearity of the concept: Could the spiral jump steps? Could it go counter clockwise? So these are the drawbacks of SECI Model.

### **3.6.2 Wiig Model:**

Wiig (1995)<sup>vi</sup> proposed the knowledge may be helpful in case if it is nicely structured. There are some practical dimensions to be noted with Wiig Knowledge Management design. They are: Completeness, Congruency, Connectedness, Purpose and Perspective. Completeness refers to check how much related knowledge can be purchased from given source. The cause of knowledge might be explicit or implicit (from human knowledge or brains bases). Connectedness refers to properly defined relation between various knowledge objects. A knowledge base offers congruence when all the facts, principles, values and relational links in between the items are constant. Perspective and Purpose is a phenomenon whereby we understand something but out of a specific perspective for a certain objective. The proposed Knowledge Management design is among the effective theoretical Knowledge Management models that are in existence today. This particular design allows the practitioners to follow a refined strategy to controlling consent depending on the kind of expertise. Wiig has defined three forms of knowledge as Public Knowledge which is explicit, taught and routinely shared and available in the public domain; Shared Expertise refers to proprietary knowledge assets that are with knowledge workers and shared in their work; Personal Knowledge is least accessible which more a tacit knowledge than explicit is. Wiig has also defined four types of knowledge: Factual Knowledge which deals with data; Conceptual Knowledge which involves concepts, system and perspectives; Exceptional Knowledge is related with judgements, hypotheses and expectations by the people who know; Methodological Knowledge refers to reasoning, strategies, decision-making methods and other techniques.

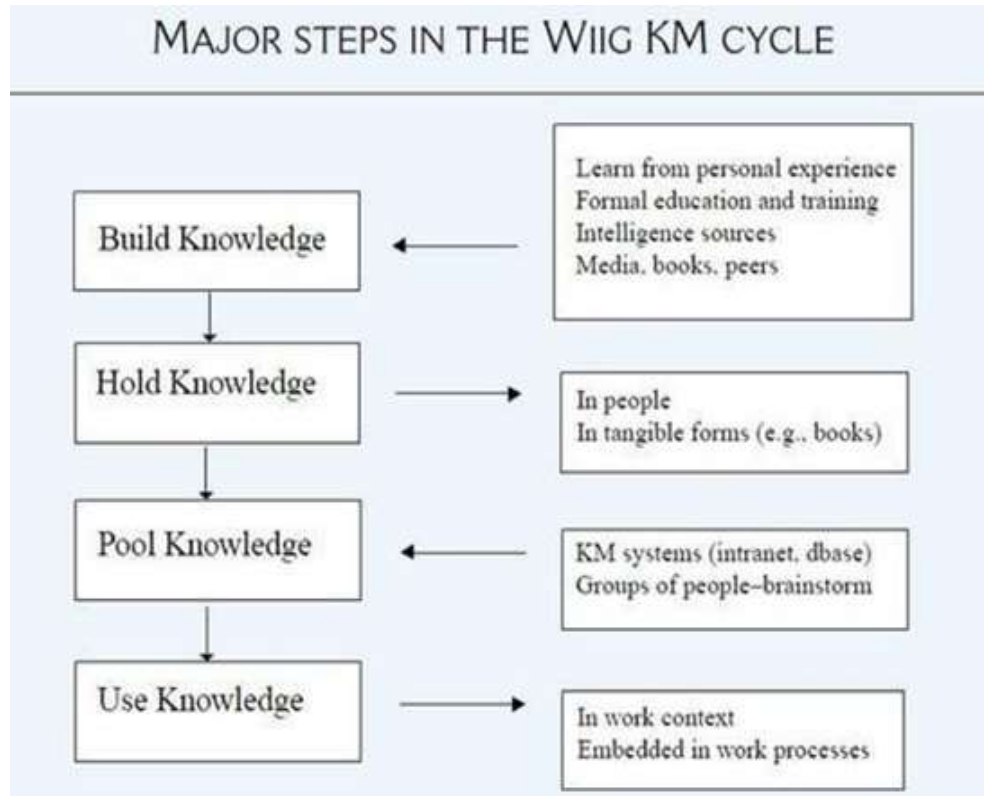


Figure 3.5: Major steps in Wiig KM Cycle<sup>vii</sup>

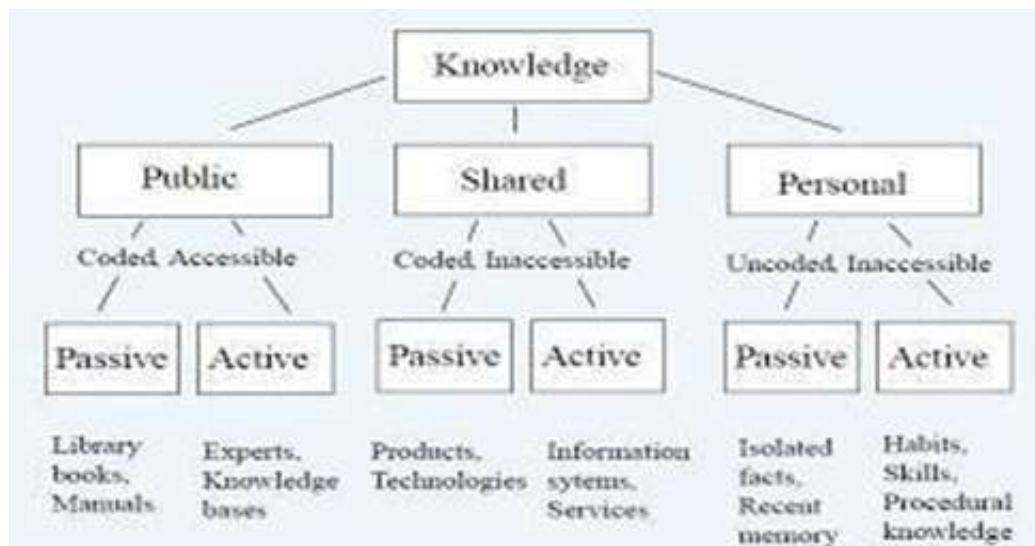


Figure 3.6: Hierarchy in the forms<sup>viii</sup>

### **3.6.3 ZACK Model:**

Michael Zack (1999)<sup>ix</sup> proposed an approach to determine the Knowledge Management strategy. He described a framework that allows an organisation to make an explicit link with the competitive circumstance of its Knowledge Management strategy to assist the organisation to maintain or even create a competitive advantage. He opined very clear by that every organisation is going to find a unique link between strategy and knowledge.

Any such competitive knowledge can be classified into innovations relative to the rest of the particular industry as: core, advanced or innovative. Advanced information is a fundamental knowledge needed by most participants of a specific business. It does not represent necessarily a competitive advantage, but simply the knowledge to function in that sector.

Advanced knowledge provides an organisation a competitive advantage. Its specific knowledge differentiates an organisation from the competitors. It can be judged by knowing higher than a competition or by using knowledge in ways that are different.

It is a fact that Innovative knowledge enables a company to become market leader. It empowers an organisation to alter the functions of a sector and represents as a major differentiating factor from many other organisations.

He has determined the organisation's natural competitive job awareness, he has defined SWOT analysis (Strengths, Weaknesses, Opportunities and Threats) to determine the strategic spaces in an organisation's understanding. This enables the organisation to identify its knowledge which is able to exploit and exactly where it must improve. Further it guides the knowledge to maintain or even grow naturally to a competitive position. This's attained by analyzing the organisation's knowledge role along 2 dimensions:

**a. Exploration vs. Exploitation:** This's "the degree to which an organisation has to increase the knowledge in a specific area vs. the chance it may need to leverage the existing under exploited knowledge resources."

**b. Internal vs. External Knowledge:** This refers to the knowledge which is largely within the organisation or even outside. Several organizations tend to be more externally oriented, making use of publications, customers, consultants, universities etc.

Others tend to be internally oriented, gathering distinctive experience and knowledge that is hard for rivals to imitate. Putting these 2 dimensions collectively, Zack details organizations are definitely more exploitative of inner information in creating a "Conservative KM Strategy".

The other ones tend to have far more innovative (exploring outside awareness) "Aggressive KM Strategy". Nevertheless, he highlights that a KM Strategy can't be made without reference to the competitors. Consequently, several industries (where knowledge is changing more rapidly) often be characterized by more intense firms, while remaining industries are generally more conservative.

### **3.6.4 Von Krogh and Roos Model:**

The Von Krogh and Roos model (1995)<sup>x</sup> differentiates between individual knowledge and social knowledge and follows the philosophical idea of expertise in order to control organizational knowledge. It is connectionist strategy and that is alternative and assumes the human brain doesn't process the symbols sequentially but perceives “wholeness”. This model says the knowledge resides both in the individuals of an organisation and in the relations between people at the social level. Knowledge cannot exist between the objects who are knowledgeable about them. As per this model, the achievements of Knowledge Management will depend on specific attitude, interaction for business, organizational structure, connection between people, and resource control. These 5 elements help in successful management of organizational knowledge. Organizations need to put knowledge enablers in a place that will stimulate the development of individual knowledge, group sharing of knowledge and retaining organizational valuable knowledge-based content. The connectionist approach followed in this model makes the foundation for theoretical model of Knowledge Management. It emphasizes the linkage between who absorb and make use of the knowledge is an unbreakable bond.

### **3.6.5 The Choo Model:**

The Choo (1998)<sup>xi</sup> Knowledge Management design concentrates on exactly how information elements are selected and converted into organizational actions. Success of Organizational activity depends on the focus and absorption of information coming from the outside environment into every successive cycle. In the sense a person tries making sense of the information streaming inside and outside of the environment. Priorities are identified and utilized to filter the information. Knowledge creation describes the transformation of individual awareness between people through dialogue, storytelling, sharing and discourse. Knowledge creation widens the spectrum of potential choices in decision making by providing new knowledge and new competencies. People will be bound in a choice process by limits in knowledge, skills, responsiveness, and habits, accessibility of private information understanding, values and norms kept by an individual. The strength of this model is holistic treatment of key Knowledge Management cycle processes extending to organizational decision making which lack in theoretical Knowledge Management approaches. This model is well suited to simulations.

## **3.7 Knowledge Management Cycles:**

To be able to manage consent efficiently in any business, one has to recognize, obtain, create, disseminate and capture the advantages of information that offer improvements on the business. Knowledge Management life cycle could be regarded as the path through which info may be transformed into an invaluable knowledge.

### **3.7.1 Meyer and Zack Knowledge Management Cycle:**

The Meyer and Zack (1999)<sup>xii</sup> proposed the Knowledge Management Cycle which includes information products i.e. information offered to external and internal customers like databases, news synopses and client profiles. Zack suggests that research and knowledge



about design of physical products can be extended into different intellectual areas to serve as the basis of knowledge management cycle. In this particular cycle, product platform is known as knowledge repository; information process platform is known as knowledge refinery. It highlights the thought of value added processing needed in order to manage the knowledge of a company. This particular cycle stresses on developing a greater value - added knowledge item in each phase of processing, e.g. a standard database can be produced and then worth can be included by removing trends from this information.

The initial information is packaged to give trend analysis that can serve as the grounds for decision making. In the exact fashion competitive intelligence is collected and mixed in an effort to repack raw data into substantial, translated and validated knowledge. These operations in this particular cycle are made up of technologies, amenities and activities for producing services and products. The content differs from business to business and organization to organization. Other side, the essential elements determine the complete approach and structure to store the information to manipulate and retrieve it. The authors of this particular cycle have laid pressure on the benefits of merchandise architecture for sustained competitive achievement. Architectures are a foundation for product development.

The cycle consists of different stages as acquisition, storage/retrieval, refinement, presentation/use and distribution. Acquisition of information or perhaps info consists of finding energy sources of feedback, which ought to be of top quality. Refining describes restructuring, integrating, indexing, relabeling, and cleaning of information. This particular stage of the cycle provides value by producing a lot more immediately usable and understandable objects. Storage /retrieval incorporates tangible i.e. files, printed info or maybe electronic storage i.e. database.

Distribution process will involve delivering of knowledge through different mediums as fax, e-mail, print, etc. The evaluation of the preceding steps is involved here. The refined repository gives valuable knowledge to the management. These repositories must be supported by ICT. This model stresses on the demand of constantly renewing the repository along with refining to stay away from obsolescence.

### **3.8 Knowledge Management Process:**

The different knowledge connected activities or processes including knowledge creation, representation, acquisition, utilization, transfer, sharing, and capture as well as networking forms part of the most crucial dimensions of KM.

#### **3.8.1 Knowledge Creation Process:**

Nonaka (1994)<sup>xiii</sup> mentioned that “businesses that are profitable are those that regularly produce new ideas, disseminate it commonly around the business, and rapidly embody them in services and products.” Review of literature reveals that Knowledge creation (both planned and unplanned) is of all the central and important most tasks of any business. Based on him, knowledge is produced through 4 processes. Socialization, Externalization, Combination and Internalization.

Socialization involves capturing information through actual physical proximity i.e.; converting tacit knowledge to tacit knowledge. Externalization demands the comprehensible expression of tacit knowledge so that it could be known by others i.e.; tacit to explicit knowledge. Combination consists of the transformation of explicit knowledge into more complicated explicit one and Internalization could be the conversion of explicit knowledge into organizational tacit knowledge. Knowledge Creation methods may be applied technically by businesses, or casual means. The formal Knowledge Creation method may be either People focused, Process oriented or maybe Event oriented.

Nonaka (1995)<sup>xiv</sup> has added emphasized on the job of informal mechanisms within Knowledge Creation. Particularly in contexts where information which gets produced during the course of everyday actions which does not spiral upwards to be organizational is casual.

Leonard-Barton (1995)<sup>xv</sup> and Prusak and Davenport (1998)<sup>xvi</sup>, emphasized on the methods of multidisciplinary or even cross practical teams as highlights for Knowledge Creation. They argued that Knowledge creation is best accomplished through Communities of Practice (CoP)',

Informal mechanism which allows Knowledge Creation is the idea of Ba' (a Japanese term meaning discussed space') suggested by Konno as well as Nonaka (2000)<sup>xvii</sup>. The types of Ba proposed by them included Physical Ba (creation of physical spaces for employee interactions), Virtual Ba (creation of internet discussion boards for virtual interaction), and emotional Ba (use of language). They advocated the originating Ba for socialization, interacting Ba for externalization, cyber Ba for combination, and exercising Ba for internalization. Although semiformal mechanisms and interventions plays a role in enabling Knowledge Creation, it's the 'informal organization' which plays a crucial role in triggering and sustaining the process of Knowledge Creation. The most crucial element of the informal organization is culture. Krogh (1998)<sup>xviii</sup> declared that organizational culture and structures greatly affect the Knowledge Creation process, since Knowledge Creation is an interpersonal process, chats and collaboration are essential.

Gray (2000)<sup>xix</sup> suggested Talk rooms, Knowledge Fairs, and also Communities of Practice as methods for Knowledge Creation. Hardy et al (2003)<sup>xx</sup> suggested that with collaborations and a very high amounts of embeddedness as well as involvement would lead to greater degrees of Knowledge Creation.

Many researchers have stressed that all Knowledge creation practices and strategies needed enablers such as organizational structure, culture, and information technology for the effective implementation. Many researchers investigated the job of businesses and people in facilitating Knowledge creation and realized that organizational mechanisms (or maybe organizational Ba') are definitely more critical compared to specific aspects in enabling Knowledge Creation.

Alavi and Leidner (2001)<sup>xxi</sup> pointed out that information systems or IT plays an immense role in facilitating Knowledge Creation, knowledge storage or retrieval, transfer, and application.

### **3.8.2 Knowledge Sharing Process:**

Systematically sharing of knowledge between its members. A company stays away from redundancy in knowledge production as well as the problem solving process. The literature mentions that Knowledge Sharing is able to happen at many levels in an organization: (a) amongst workers within a team; (b) involving workers throughout departments; (c) amongst teams inside exactly the same department; and (d) between teams across departments.

Hall (1992)<sup>xxii</sup> highlighted that in many organisations, IT systems are looked on as a significant player in enabling Knowledge Sharing process. Establishing Intranets and Databases that have knowledge repositories are popular practices in most businesses. These IT methods serve as a „knowledge broker' between workers or teams and also participate in a crucial part in enabling the sharing of explicit knowledge. At the same time, it is seen from the literature that organizations have realized the fact that interactions among employees are critical for sharing of tacit knowledge. Not many businesses depend on official mechanisms to allow Knowledge Sharing, while others depend on casual mechanisms.

McDermott (1999)<sup>xxiii</sup> mentioned that in a company having a knowledge sharing culture, individuals will discuss insights and thoughts since they view it as healthy, rather compared to one thing they're made to do. A lot of scientists have commented on the benefits of social or informal networks inside a company in enabling Knowledge Sharing. He found that human networks are among the essential automobiles for sharing knowledge. They realized that beating cultural barriers' to sharing expertise had much more to do, together with the layout as well as implementation of KM than with altering organizational culture. Many researchers noted that in case people aren't driven to share knowledge, it's not likely that they will utilize equipment facilitating Knowledge Sharing.

Holsapple et.al (2002)<sup>xxiv</sup> given an evaluation of the Knowledge Sharing literature and identified several of the primary key elements which inspire (or maybe demotivate) individuals to talk about their knowledge. He recommended that organizational commitment would influence the productivity of employees to share knowledge.

Sharkie (2003)<sup>xxv</sup> argued that excessive levels of trust will be required before people are susceptible to begin conversing and showing a willingness to talk about the knowledge of theirs. The significance of a knowledge-friendly' tradition continues to be stressed by numerous researchers.

### **3.8.3 Knowledge Utilization Process:**

Knowledge Utilization (KU) deals with organizational methods and procedures which allow utilization of knowledge readily available to the business. They worried that an essential requirement of Knowledge Management is improving the organizational Knowledge Utilization process. They asserted that a firm's competitive advantage depends not merely on Knowledge Creation, but even more important on knowledge diffusion and application. Many researchers stated that if a company doesn't think it is easy to locate the proper kind of knowledge in the proper form, the firm might find it hard to sustain the competitive advantage of it.

Kulkarni et al (2007)<sup>xxvi</sup> found that organizational support components are co-workers, supervisor, or leadership commitment, in addition to bonuses which indirectly or indirectly backed know-how consumption. They advocated installing procedures and policies for incentives, recognition, rewards and also promoting internationalization of knowledge sharing and reuse practices. They influence leadership and culture on Knowledge Utilization process. They argued that it's the job of leadership to ensure availability and accessibility of knowledge to workers.

Leidner and Alavi (2001)<sup>xxvii</sup> commented that elements such as trust, insufficient chance or time, and risk aversion may affect Knowledge Utilization process. He mentioned that it enables to improve Knowledge Utilization by facilitating the capture, updating and accessibility of organizational awareness. They pointed out that technology is able to help support knowledge program by embedding information into organizational actions.

### **3.9 Comparison of the Cycles:**

The Meyer and Zack (1999)<sup>xxviii</sup> designed full description of the primary key elements, which are active in the Knowledge Management model. The strength of this particular cycle is thorough information processing which is totally adaptable to knowledge based content. The idea of refinement is provided and that is vitally important. This particular cycle presents 2 serious phases i.e. learning of knowledge and the decision as to whether to maintain this knowledge or divest the organization of this content.

McElroy (2003)<sup>xxix</sup> highlighted that Knowledge Management Cycle offers clear explanation on how knowledge is examined and a conscious decision is made in order to integrate into organizational memory. The validation is an action which definitely distinguishes Knowledge Management from paper control.

This Knowledge Management cycle focuses on procedures to recognize knowledge articles that's of worth to the group along with its employees. The benefit of Knowledge Management cycles is definitely a detailed and clear explanation of the way how the organizational memory is put to use to generate value for individuals, groups and the organization. In this particular cycle the ability and usage of knowledge, the restrictions that could stop the knowledge unutilized, options and possibilities in controlling these aspects are anticipated to a great extent in the company which is explicitly shown.

The main techniques to KM cycles are provided from Nickolas (1996)<sup>xxx</sup>, Meyer and Zack (1999)<sup>xxxi</sup>, Rollet (2003)<sup>xxxii</sup>, Williams and Bukowitz (2000)<sup>xxxiii</sup>, McElroy (2003)<sup>xxxiv</sup>, and Wiig (1995)<sup>xxxv</sup>. Effective knowledge management demands a company to determine, diffuse, acquire, generate, and capture the advantages of information offering a strategic advantage to that particular business.

The Knowledge information cycle could be envisaged when a route information follows. It can be converted into an invaluable strategic advantage for the business through a knowledge management cycle. The terms used differ, but there does seem to be some overlap in the various kinds of steps involved in a KM life cycle. To this end, four models were selected based on their ability to meet the following criteria through KM Cycles, Table (3.1).

**Table 3.1: A comparison of key KM cycle processes**

Nickols (1999)	Wiig (1993)	McElroy (1999)	Rollet (2003)	Bukowitz and Williams (2003)	Zack (1996)
Acquisition	Creation	Individual and Group learning	Planning	Get	Acquisition
Organisation	Sourcing	Knowledge claim validation	Creating	Use	Refinement
Specialisation	Compilation	Information acquisition	Integrating	Learn	Store/Retrieve
Store/access	Transformation	Knowledge validation	Organizing	Contribute	Distribution
Retrieve	Dissemination	Knowledge Integration	Transferring	Assess	Presentation
Distribution	Application		Maintaining	Build/sustain	
Conservation	Value realization		Assessing	Divest	
Disposal					

Source: Kimiz Dalkir (2005)<sup>xxxvi</sup>

### 3.10 Integrated KM Cycle:

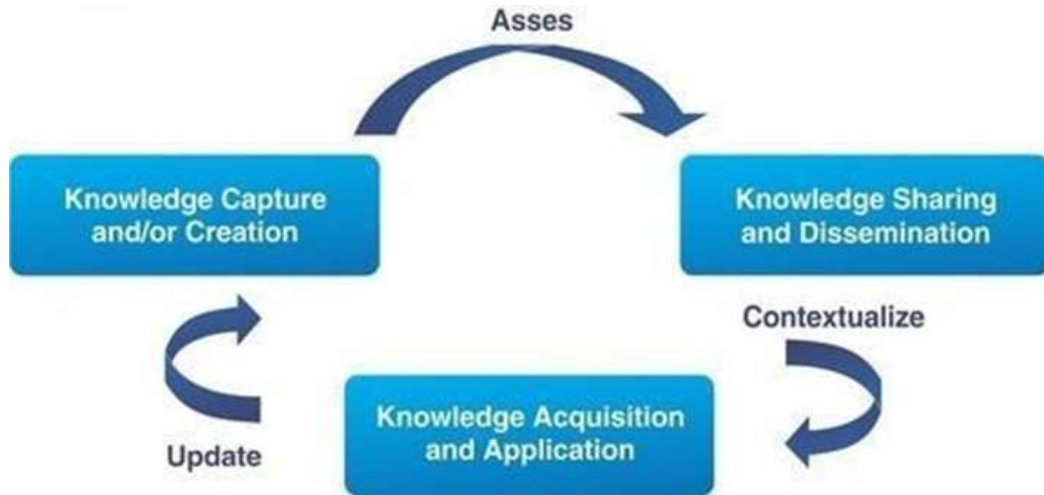
On the basis of the preceding study of some major approaches to KM cycles, it is attempted to distil an integrated KM Cycle. The 3 leading stages are: Knowledge capture or creation; Knowledge sharing and dissemination; Knowledge acquisition and application.

In transition from capture/creation to knowledge sharing and dissemination, knowledge content is assessed. Knowledge will be contextualized to be understood (acquisition) and also utilized (application).

The incorporated KM cycle is reported in the Figure 3.6. The following diagrammatic cycle subsumes the majority of the steps active in the earlier KM cycles. Although not sufficient, knowing the various phases is crucial in controlling information throughout the KM cycle.

From an organizational viewpoint, managing information demands, organizing principle-a framework-that is going to help us, classify the various kinds of activities and capabilities required to cope with all knowledge related work within and between organizations are paramount.

This particular framework is frequently encapsulated in the type of a KM principle or model.



**Figure 3.7: Integrated KM Cycle** xxxvii

Various aspects of KM like individuals, process, technology or infrastructure, leadership, culture, systems, structure, strategy, and organizational climate or environment have been reviewed in the literature. Broadly, you will find 2 types of KM literature on areas of enabling conditions: (a) the ones that strain on individuals, tradition and leadership areas; and (b) those that stress on technology, infrastructure, and systems along with other organizational aspects. The following table 3.2 reveals the primary key KM Strategies or Practices.

**Table 3.2: Summary and Classification of popular KM Strategies**

<b>Tacit Knowledge oriented (Connecting People-to-People)</b>	<b>Explicit Knowledge oriented (Connecting People-to-Documents)</b>
1. Communities of Practice	1. Knowledge Repositories
2. Knowledge Fairs	2. Intranets and Knowledge Portals
3. After Action Reviews	3. Best Practices Database
4. Talk Rooms	4. Lessons Learnt Database
5. Online Bulletin Boards	5. Corporate Yellow Pages
6. Knowledge Forums	6. Knowledge Map
7. Video Conferencing	7. Knowledge Encyclopedia or Books of Knowledge
8. Groupware and Collaboration Tools	8. Dedicated Resources
9. Email	9. Help Desks
10. Collective Reflection	10. Learning Histories
11. Mentoring	11. Corporate Museums
12. Knowledge Roadmap	12. Semantic Web

Tacit Knowledge oriented (Connecting People-to-People)	Explicit Knowledge oriented (Connecting People-to-Documents)
	13. Case-Based Reasoning 14. Blogs and Wiki Tools 15. Search Engines 16. Taxonomies and Ontologies

### 3.11 Conclusion:

This chapter offers an insight into related models and knowledge Management. This particular chapter presentation involves the research about evolution of Knowledge Management. Important ideas in Knowledge Management are reviewed with examples. You will find numerous definitions of Knowledge Management family member to certain places. Different pre-existing designs of Knowledge Management are talked about. For instance, SECI (Socialization Externalization, Combination and Internalization) is a famous model created by Takeuchi and Nonaka (1995)<sup>xxxviii</sup>. In this particular model, the knowledge is created dynamically and it is processed efficiently. Some other Knowledge Management models and Knowledge Management cycles analyzed are include Zack (1999)<sup>xxxix</sup>, Wiig KM cycle (1995)<sup>xl</sup>, Bukowitz and Willi as Knowledge Management Cycle (1999)<sup>xli</sup> and McElroy Knowledge Management Cycle (1999)<sup>xlii</sup>. Several of the definitions and function of KM by various authors are stated in the terms of theirs, that are taken from numerous publications, journals, articles to be able understand and explain different ideas, cycles and models of Knowledge Management.

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## Chapter 4

# KM Enablers, Knowledge Creation Process, Organisational Creativity and Organisational Performance in Select SME's: Managerial Perspective

The main aim of this chapter is to present the perceptions of Managerial Staff in the Select SME's. The chapter is presented in the following manner.

- First, overall view of Factor analysis was presented.
- Identifying the KMO and Bartlett's test of Sphericity to perform the analysis
- In the next level mean and standard deviation of the responses are presented.
- Identifying the Scale reliabilities, Convergent validity, Communality matrix; Correlation Matrix, Rotated Component Matrix of Factor analysis of KM Enablers, Knowledge Creation process, Organisational Creativity and Organisational performance was presented.
- Multiple regression analysis was conducted between KM Enablers and Knowledge creation process, Knowledge creation process and Organisational creativity, Organisational creativity and organisational performance.
- Finally, Demographic profiles of the respondents were presented.

### 4.1 Introduction:

In this study, factor analysis is used to check discriminant validity from Lee and Choi (2003)<sup>i</sup>. Discriminant validity refers to the degree to which measures of different concepts are different. This means that correlation of coefficients of items of the same scale should be higher than correlation coefficients of items across constructs. Bryman and Cramer(2000)<sup>ii</sup> highlighted that factor analysis can be used to assess the degree to which items are measuring the same concepts or variables, Therefore, confirmatory factor analysis was conducted to assess the overall measurement models and examine the discriminant validity of the research constructs. Factor analysis is conducted as a structure detection method for the justified scales of organisational creativity and organisational performance. Factor analysis is also conducted to explain how the four modes of knowledge creation relate to the construct measuring them and to establish the consistency of the items.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.766
Approx. Chi-Square	9976.590
Bartlett's Test of Df Sphericity	630
Sig.	.000

Further analyses are conducted to ensure that factor analysis is appropriate to be conducted in this study. To predict if data are likely to factor well, Kaiser-Myer-Olkin(KMO) measure of sampling adequacy (MSA) is 0.766 and Bartlett's test of sphericity are utilized. Although Garson (2001)<sup>iii</sup> indicates that KMO varies from 0 to

1.0 and KMO overall should be 0.60 or higher to proceed with factor analysis, several researchers such as De Vaus (2002)<sup>iv</sup>, Field (2000)<sup>v</sup> state that KMO generally should be equal to or greater than 0.5. As the Table indicates 4.1 the KMO statistics is greater than the cut-off level, at a significant level of 0.001. In comparison with the above-mentioned cut-off (levels), the KMO is very high. Malhotra (1999)<sup>vi</sup>, Bartlett's test of Sphericity is used to examine the hypotheses that the variables are uncorrelated in the population, in other words, the population correlation matrix is an identity matrix.

Bartlett's test of Sphericity in this study presented in the Fig above 4.1 in the appendix is also highly significant. The investigation of the Anti-image correlation matrices presented in Figure 4.1 (in the appendix), indicate that all, measures of sampling adequacies (MSAs) are well above the acceptable level of 0.5 according to Coakes and Steed (1999)<sup>vii</sup>. Thus, it can be concluded that factor analysis of the scale items is appropriate.

Hair *et al.* (1998) stated that once the variables are specified and the correlation matrix is prepared, the researcher is ready to apply factor analysis to identify the underlying structure of relationships. In doing so, decisions must be made concerning (1) the method of extracting the factors (the researcher already stated that confirmatory factor analysis will be used) and (2) the number of factors selected to represent the underlying structure in the data as also stated by Migdadi(2005)<sup>viii</sup>. Determining the number of factors to extract is not a straightforward task since the decision is ultimately subjective.

In general, the individual factor should account for the variance of at least a single variable (each variable has a variance of 1.0) if it is to be retained for interpretation as specified by Hair *et al.* (1995)<sup>ix</sup> and Fidell (1989). The second procedure is the screen test of eigen values plotted against the number of factors in order of extraction. The rate of decline tends to be fast for the first few factors but then levels off to the right of the plot. The gradual trailing off is referred to as the *screen*. Hair *et al.* (1995)<sup>x</sup> highlighted that the point at which the curve first begins to straighten out is considered to indicate the maximum number of factors.

Several procedures have been suggested for determining the number of factors. The most commonly used technique is the latent criterion or eigen value and screen plot. The eigenvalue of a factor is the amount of variance in all the variables that is explained by that factor.

Only factors with latent roots or eigen values greater than 1.0 are retained; the other factors with roots less than 1.0 are considered insignificant and are not included in the model. The eigen values and the screen plot are investigated shown in Figure 4.2.

Tabachnick(1989)<sup>xi</sup> stated that Once the researcher knows how many factors to use, the variables which most „belong“ to each other need to be clarified in order to make them more

interpretable; therefore, it is important to look at the rotated loading matrix to determine the number of variables that load on each factor ,

Factor loadings are the correlation coefficients between the variables (rows) and factors (columns). Thus, loadings indicate the degree of correspondence between the variable and the factor with higher loadings making the variable representative of the factor.

Although the initial or un-rotated factor matrix indicates the relationship between the factors and individual variables, it seldom results in factors that can be interpreted – it is usually difficult to determine whether un-rotated factors will be meaningful because the factors are correlated with many variables. Rotation serves to make the output more understandable (simplify the factor structure) and to achieve a more meaningful and interpretable solution.

The researcher utilises the most common method for rotation that is the varimax orthogonal procedure. Varimax minimizes the number of variables with high loadings on any given factor, thereby enhancing the interpretability of the factors. In interpreting factors, a decision must be made regarding which factors loadings are worth considering.

Factors loadings greater than /0.30/ (absolute value of 0.30) are considered to meet the minimum level, and loadings of /0.40/ are considered more significant as stated by Hair *et al.* (1995)<sup>xii</sup>. Thus, factor loadings below the absolute value of 0.4 are to be suppressed.

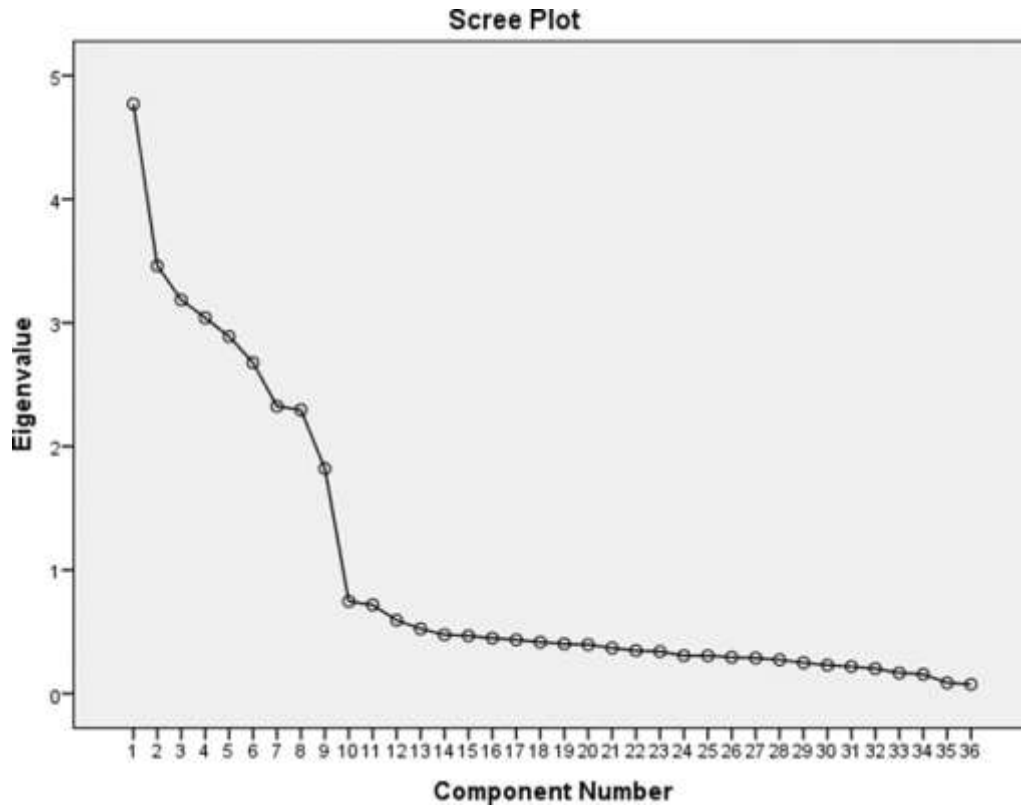
Once all significant loadings are identified, the researcher attempts to assign some meaning to the factors based on the patterns of the factor loadings. Cronbach's alpha is used for examining the internal reliability of the research's multi-items scales. This is done by testing to see that the items which make up the scale are all measuring a single idea.

Lee and Choi(2003)<sup>xiii</sup> stated that both inter-rater reliability and agreement analysis were necessary because the questionnaire was distributed to organisational members to measure the characteristics of their organisation and therefore their answers should be aggregated and used as an organisational indicator (Inter-rater reliability is referred to as an index of consistency; it represents the consistency of variance among raters according to Lawlis and Lu(1972)<sup>xiv</sup> and is core relational in nature.

In contrast, agreement is defined as the inter-changeability among raters; it addresses the extent to which raters make the same ratings. The non-response rate has been checked by using the extrapolation estimation method. Response rate is influenced by design matters, such as the appearance of a questionnaire, its length and readability, and its general layout.

According to various researchers non-response rate can create two main problems: the first problem is an unacceptable reduction of sample size; the second problem is bias. This is in line who states that, "Sample loss...is likely to introduce bias because it might increase the proportion of more persistent or better educated respondents".

Finally, the scores of all interval levels of measurement were summed up and utilised in the survey analysis.



**Figure 4.2: Component Number**

**Descriptive Statistics:**

**Table 4.1: Perceptions of Managers on Organisational Culture wrt collaboration**

Serial No.	Items	Mean	Standard Deviation
1	Our organization members are supportive	3.46	1.107
2	Our organization members are helpful	3.52	1.016
3	There is a willingness to collaborate across organizational units within our organization	3.45	.967
4	There is a willingness to accept responsibility for failure	3.48	1.007

The Managers of Select SME’s felt that the organizational members are helpful (3.52), there is a willingness to accept responsibility for failure (3.48), the members are supportive (3.46) and there is a willingness among the members to collaborate across organizational units within the organization (3.45).

**Table 4.2: Perceptions of Managers on Organisational Culture wrt Trust**

Serial No.	Items	Mean	Standard Deviation
1	Our company members have reciprocal faith in other members intentions and behaviors	3.30	.940
2	Our company members have reciprocal faith in others ability	3.26	.910
3	Our company members have reciprocal faith in others behaviors to work toward organizational goals.	3.22	.871
4	Our company members have reciprocal faith in others decision toward organizational interests than individual interests.	3.39	.885

The Managers of Select SME's felt that the company members have reciprocal faith in others decision toward organizational interests than individual interests (3.39), the company members have reciprocal faith in other members intentions and behaviours (3.30), the company members have reciprocal faith in others ability (3.26) and the company members have reciprocal faith in other behaviours to work toward organization goals (3.22).

**Table 4.3: Perceptions of Managers on T-shaped skills**

Serial No.	Items	Mean	Standard Deviation
1	Our company members can understand not only their own tasks but also others tasks	3.39	1.012
2	Our company members can make suggestion about others task	3.39	1.082
3	Our company members can communicate well not only with their department members but also with other department members	3.42	.952
4	Our company members are specialists in their own part	3.36	1.017

The Managers of Select SME's felt that the company members can communicate well not only with their department members but also with other department members (3.42), the company members can understand not only their own tasks but also other tasks (3.39), the company members can make suggestion about others task (3.39) and the company members are specialists in their own part (3.36).

**Table 4.4: Perceptions of Managers on Transformational Leadership**

Serial No.	Items	Mean	Standard Deviation
1	Our leadership engages in activities involving considerable personal risk in pursuing organizational objectives	3.21	.956
2	Our leadership makes me aware of strongly held values, ideals and aspirations which are shared in common	3.22	.818
3	Our leadership encourages creativity and new idea generation	3.27	.872
4	Our leadership encourages two way exchange in communication	3.23	.905

The Manager of Select SME's felt that the company's leadership encourages creativity and new idea generation (3.27), the leadership encourages two way exchange in communication (3.23), the leadership makes me aware of strongly held values, ideals and aspirations which are shared in common (3.22), the leadership engages in activities involving considerable personal risk in pursuing organizational objectives.

**Table 4.5: Perceptions of Managers on Information Technology**

Serial No.	Items	Mean	Standard Deviation
1	Our company provides IT support for communications among organization members	3.07	1.001
2	Our company provides IT support for searching for and accessing necessary information	3.02	.913
3	Our company provides IT support for simulation and prediction	3.12	.911
4	Our company provides IT support for systematic storing	3.03	.923

The Managers of select SMEs felt that the company provides IT Support for simulation and prediction (3.12), the company provides IT support for communications among organization members (3.07), the company provides IT support for systematic storing (3.03), the company provides IT Support for searching for and accessing necessary information(3.02).

**Table 4.6: Perceptions of Managers on Human Resource Management wrt Selection of Employees**

Serial No.	Items	Mean	Standard Deviation
1	Our Organization encourages multilingual ability for selection of employees	3.33	.936
2	Our Organization selects the members who works in a team or group efficiently	3.34	.869
3	In our Organization, people who exhibit interest in learning are preferred	3.29	.843
4	Our organization considers related professional experience for employees	3.20	.834

The Managers of select SME's felt that the organization selects the members who works in a team or group efficiently(3.34), the organization encourages multilingual ability for selection of employees(3.33), In organization people who exhibit interest in learning are preferred(3.29),the organization considers related professional experience for employees(3.20) .

**Table 4.7: Perceptions of Managers on Human Resource Management wrt Training and Development**

Serial No	Items	Mean	Standard Deviation
1	Our Organization rewards and recognizes trained staff.	3.23	.945
2	Our Organization encourages employees to participate in internal and external new learning opportunities such as conferences, seminars, university courses, training etc	3.17	.882
3	Our Organization provides training in skills development such as documentation, creative thinking, problem solving, communication, teambuilding etc	3.25	.886
4	Our company provides training by presenting various contexts and many examples in which trainee can expect to use the skills and knowledge in real time environment.	3.29	.922

The Managers of select SME's felt that the organization provides training by presenting various contexts and many examples in which the trainee can expect to use the skills and knowledge in real time environment(3.29), the organization provides training in skills development such as documentation, creative thinking, problem solving, communication, team building etc.(3.25),the organization rewards and recognizes trained staff(3.23) and the organization encourages employees to participate in internal and external new learning opportunities such as conferences, seminars, university courses, training etc.(3.17).



**Table 4.8: Perceptions of Managers on Human Resource Management wrt Performance Appraisal**

Serial No.	Items	Mean	Standard Deviation
1	Our company provides feedback which is useful for improvement	3.42	0.91
2	Our company provides feedback which is used for ratings, reward and sanctions	3.35	0.874
3	Our company collects feedback based on personal characteristics not relevant to work	3.32	0.881
4	Our company collects feedback based on the key process indicators	3.25	0.911

The Managers of select SME's felt that the company provides feedback which is useful for improvement (3.42), the company provides feedback which is used for ratings, reward and actions (3.35), the company collects feedback based on personal characteristics not relevant to work (3.32) and the company collects feedback based on the key process indicators (3.25).

**Table 4.9: Perceptions of Managers on Human Resource Management wrt Compensation Reward System**

Serial No.	Items	Mean	Standard Deviation
1	Our organization rewards for measurable competencies.	3.26	0.996
2	In Our Organization employees are rewarded for new ideas	3.32	0.907
3	Our organization keeps group incentives clear and simple	3.33	0.884
4	Our Organization rewards those who brings improvement in work or output	3.31	0.947

The Managers of select SME's felt that the organization keeps group incentives clear and simple (3.33), the organization employees are rewarded for new ideas (3.32), the organization rewards those who brings improvement in work or output (3.31) and the organization rewards for measurable competencies (3.26).

**Table 4.10: Perceptions of Managers on Knowledge Creation Process wrt Socialization**

Serial No.	Items	Mean	Standard Deviation
1	Our company stresses sharing experience with suppliers and customers	3.3	1.179
2	Our company stresses engaging in dialogue with competitors	3.31	1
3	Our Company gathers information inside to develop strategies	3.31	0.955
4	Our company encourages observing the work of experts and skilled people	3.41	1.033

The Managers of select SME's felt that the company encourages observing the work of experts and skilled people (3.41), the company gathers information inside to develop strategies (3.31), the company stresses engaging in dialogue with competitors (3.31) and the company stresses sharing experience with suppliers and customers (3.3).

**Table 4.11: Perceptions of Managers on Knowledge Creation Process wrt Externalization**

Serial No	Items	Mean	Standard Deviation
1	Our Company encourages documenting one's expertise for others to use.	3.18	0.825
2	Our Company facilitates exchange of ideas through Social media	3.23	0.831
3	Our Company circulates suggestions and improvements through channels like brochures, circulars etc.	3.16	0.821
4	Our Company applies the best knowledge to deliver our organizational products and services.	3.25	0.822

The Managers of select SME's felt that the company applies the best knowledge to deliver our organizational products and services (3.25), the company facilitates exchange of ideas through social media (3.23), the company encourages documenting one's expertise for others to use (3.18) and the company circulates suggestions and improvements through channels like brochures, circulars etc.(3.16).

**Table 4.12: Perceptions of Managers on Knowledge Creation Process wrt Combination**

Serial No.	Items	Mean	Standard Deviation
1	Our company develops plans based on published information, forecasting etc.	3.46	0.898
2	Our company stresses creating manuals and documents on products and services.	3.46	0.895
3	Our company is keen on creating a data-base on products and service	3.42	0.858
4	Our Company develops reports by gathering both technical and financial information	3.47	0.889

The Managers of select SME's felt that the company develops reports by gathering both technical and financial information (3.47), the company develops plans based on published information, forecasting etc. (3.46), the company stresses creating manuals and documents on products and services (3.46) and the company is keen on creating a data-base on products and services (3.42).

**Table 4.13: Perceptions of Managers on Knowledge Creation Process wrt Internalization**

Serial No.	Items	Mean	Standard Deviation
1	In our company cross functional teams works together for development	3.27	0.72
2	In Our company teams experiments with improvements and the result are shared with departments	3.3	0.696
3	In our company employees search and share new values and thoughts	3.36	0.708
4	Our company helps employees to understand and share management vision through group communication	3.29	0.72

The Managers of select SME's felt that the company employees search and share new values and thoughts (3.36), In the company teams experiments with improvements and the result are shared with the departments (3.3), the company helps employees to understand and share management vision through group communication (3.29) and the company cross functional teams works together for development (3.27).

**Table 4.14: Perceptions of Managers on Organisational Creativity**

Serial No.	Items	Mean	Standard Deviation
1	Our company has produced many novel and useful ideas (service/products).	3.28	0.715
2	Our company fosters an environment that is conducive to our own ability to produce novel and useful ideas.	3.3	0.706
3	Our company spends much time for producing novel and useful ideas.	3.32	0.701
4	Our company considers producing novel and useful ideas as important activities	3.28	0.712

The Managers of select SME's felt that the company spends much time for producing novel and useful ideas (3.32), the company fosters an environment that is conducive to our own ability to produce novel and useful ideas (3.3), the company considers producing novel and useful ideas as important activities (3.28) and the company has produced many novel and useful ideas (3.28).

**Table 4.15: Perceptions of Managers on Organisational Performance**

Serial No.	Items	Mean	Standard Deviation
1	Compared with key competitors, our company has a greater market share	3.22	0.766
2	Compared with key competitors, our company is growing faster	3.26	0.702
3	Compared with key competitors, our company is more profitable	3.24	0.732
4	Compared with key competitors, our company is more innovative	3.28	0.703

The Managers of select SME's felt that, compared with key competitors, the company is more innovative (3.28), the company is growing faster (3.26), the company is more profitable (3.24) and the company has a greater market share (3.22)

**Table 4.16: Scale reliabilities**

The following table represents the internal reliability for each construct measured in the pilot study.

Serial No.	Items	Chronbach's alpha	Serial No	Items	Chronbach's alpha	Serial No	Items	Chronbach's Alpha
1	COL1	0.866	27	T&Dev;D3	0.849	53	OC1	0.704
2	COL2	0.858	28	T&Dev;D4	0.844	54	OC2	0.706
3	COL3	0.883	29	CRS1	0.839	55	OC3	0.723
4	COL4	0.889	30	CRS2	0.863	56	OC4	0.721
5	TRU1	0.833	31	CRS3	0.864	57	OP1	0.703
6	TRU2	0.842	32	CRS4	0.848	58	OP2	0.732
7	TRU3	0.847	33	P&A1	0.764	59	OP3	0.749
8	TRU4	0.842	34	P&A2	0.778	60	OP4	0.707
9	TSK1	0.753	35	P&A3	0.792			
10	TSK2	0.851	36	P&A4	0.792			
11	TSK3	0.816	37	SOC1	0.866			
12	TSK4	0.75	38	SOC2	0.866			
13	TFL1	0.825	39	SOC3	0.873			
14	TFL2	0.848	40	SOC4	0.883			
15	TFL3	0.844	41	EXT1	0.796			
16	TFL4	0.827	42	EXT2	0.808			
17	ITS1	0.871	43	EXT3	0.8			
18	ITS2	0.847	44	EXT4	0.801			
19	ITS3	0.895	45	COM1	0.833			
20	ITS4	0.846	46	COM2	0.84			
21	SOE1	0.824	47	COM3	0.841			
22	SOE2	0.83	48	COM4	0.828			
23	SOE3	0.839	49	INT1	0.751			
24	SOE4	0.843	50	INT2	0.725			
25	T&Dev;D1	0.844	51	INT3	0.725			
26	T&Dev;D2	0.855	52	INT4	0.726			

From the above table 4.16 the reliabilities scale. Chronbach's alpha is a statistic. It is generally used as a measure of internal consistency or reliability of measurement. When items are used to form a scale they need to have internal consistency.

Generally alpha coefficient ranges in value from 0 to 1 and may be used to describe the reliability factors extracted from dichotomous (1= Poor, 5=Excellent). Reliability Scores 0.7 or higher in order to use psychometric instrument. This rule should be applied with caution when alpha has been computed from items that are not correlated.

**4.17 Convergent Validity:**

The table 4.17 represents an item –total correlation test is performed to check if any item in the set of tests is inconsistent with the averaged behaviour of others, and thus can be discarded. From the given table 4.17, all corrected item-total correlation lies between 0.5-0.9, indicates proper items for further tests.

The corrected item correlation items for collaboration are between 0.7- 0.9;Trust items in term of corrected item correlation is between 0.7-0.8; T- Shaped skills are between 0.5-0.8; Corrected item correlation is between 0.5- 0.8; Transformational leadership for corrected item correlation is between 0.6- 0.8; IT support Corrected item total correlation is 0.6-0.9;Selection of employees is between 0.7-0.8;

Training and Development Corrected item total correlation is between 0.7-0.8; Performance appraisal for corrected item correlation is between 0.6-0.7; Compensation and Reward system Corrected item total correlation is between 0.7-0.8; Socialization is between 0.7-0.9; Externalization is between the item correlation 0.6-0.7; Combination is between 0.7-0.8; Internalization is between corrected item correlation 0.5-0.7; Organisational creativity for corrected item correlation is between 0.5-0.6;Organisational Performance for corrected item correlation is 0.5-0.7.

**Table 4.17: Convergent Validity- Correlation Corrected Item Analysis**

Serial No.	Items	Corrected Item- Total Correlation	Serial No.	Items	Corrected Item- Total Correlation	Serial No	Items	Corrected Item- Total Correlation
1	COL1	0.807	25	T&Dev;D1	0.754	49	INT1	0.553
2	COL2	0.828	26	T&Dev;D2	0.726	50	INT2	0.605
3	COL3	0.76	27	T&Dev;D3	0.739	51	INT3	0.604
4	COL4	0.74	28	T&Dev;D4	0.753	52	INT4	0.601
5	TRU1	0.753	29	P&A1	0.692	53	OC1	0.587
6	TRU2	0.731	30	P&A2	0.661	54	OC2	0.583
7	TRU3	0.719	31	P&A3	0.629	55	OC3	0.552
8	TRU4	0.73	32	P&A4	0.63	56	OC4	0.554
9	TSK1	0.763	33	CRS1	0.791	57	OP1	0.618
10	TSK2	0.547	34	CRS2	0.727	58	OP2	0.563
11	TSK3	0.619	35	CRS3	0.725	59	OP3	0.531
12	TSK4	0.768	36	CRS4	0.766	60	OP4	0.613
13	TFL1	0.757	37	SOC1	0.804			
14	TFL2	0.698	38	SOC2	0.799			
15	TFL3	0.708	39	SOC3	0.781			
16	TFL4	0.749	40	SOC4	0.748			

Serial No.	Items	Corrected Item- Total Correlation	Serial No.	Items	Corrected Item- Total Correlation	Serial No.	Items	Corrected Item- Total Correlation
17	ITS1	0.756	41	EXT1	0.69			
18	ITS2	0.819	42	EXT2	0.662			
19	ITS3	0.686	43	EXT3	0.681			
20	ITS4	0.821	44	EXT4	0.679			
21	SOE1	0.75	45	COM1	0.731			
22	SOE2	0.734	46	COM2	0.715			
23	SOE3	0.712	47	COM3	0.712			
24	SOE4	0.7	48	COM4	0.743			

**Table 4.18: Communalities Matrix**

Serial No.	Items	Communalities	Serial No.	Scales	Communalities	Serial No.	Scales	Communalities
1	COL1	0.81	25	T&Dev;D1	0.764	49	INT1	0.562
2	COL2	0.83	26	T&Dev;D2	0.728	50	INT2	0.629
3	COL3	0.763	27	T&Dev;D3	0.726	51	INT3	0.623
4	COL4	0.727	28	T&Dev;D4	0.759	52	INT4	0.629
5	TRU1	0.769	29	P&A1	0.711	53	OC1	0.612
6	TRU2	0.737	30	P&A2	0.664	54	OC2	0.608
7	TRU3	0.731	31	P&A3	0.651	55	OC3	0.569
8	TRU4	0.725	32	P&A4	0.648	56	OC4	0.573
9	TSK1	0.826	33	CRS1	0.792	57	OP1	0.646
10	TSK2	0.524	34	CRS2	0.72	58	OP2	0.58
11	TSK3	0.613	35	CRS3	0.719	59	OP3	0.533
12	TSK4	0.823	36	CRS4	0.766	60	OP4	0.642
13	TFL1	0.761	37	SOC1	0.799			
14	TFL2	0.697	38	SOC2	0.793			
15	TFL3	0.715	39	SOC3	0.774			
16	TFL4	0.754	40	SOC4	0.737			
17	ITS1	0.75	41	EXT1	0.697			
18	ITS2	0.838	42	EXT2	0.659			
19	ITS3	0.665	43	EXT3	0.696			
20	ITS4	0.836	44	EXT4	0.68			
21	SOE1	0.749	45	COM1	0.73			
22	SOE2	0.737	46	COM2	0.711			
23	SOE3	0.724	47	COM3	0.707			
24	SOE4	0.712	48	COM4	0.745			

**Table 4.19: Correlation Matrix for Knowledge Management Enablers, Process and Organisational Performance**

**Table 4.19 (a): Correlation Matrix for the Collaboration Scale**

	Inter-Item Correlation Matrix			
	COL1	COL2	COL3	COL4
COL1	1	0.82	0.662	0.667
COL2	0.82	1	0.706	0.659
COL3	0.662	0.706	1	0.687
COL4	0.667	0.659	0.687	1

**Table 4.19 (b): Correlation Matrix for Trust Scale**

	Inter-Item Correlation Matrix			
	TRU1	TRU2	TRU3	TRU4
TRU1	1	0.624	0.661	0.672
TRU2	0.624	1	0.638	0.65
TRU3	0.661	0.638	1	0.585
TRU4	0.672	0.65	0.585	1

**Table 4.19 (c): Correlation Matrix for T-Shaped Skills-People**

	Inter-Item Correlation Matrix			
	TSK1	TSK2	TSK3	TSK4
TSK1	1	0.45	0.526	0.903
TSK2	0.45	1	0.536	0.46
TSK3	0.526	0.536	1	0.527
TSK4	0.903	0.46	0.527	1

**Table 4.19 (d): Correlation Matrix for Transformational Leadership**

	Inter-Item Correlation Matrix			
	TFL1	TFL2	TFL3	TFL4
TFL1	1	0.573	0.67	0.707
TFL2	0.573	1	0.61	0.655
TFL3	0.67	0.61	1	0.574
TFL4	0.707	0.655	0.574	1



**Table 4.19 (e): Correlation Matrix for IT Support**

	Inter-Item Correlation Matrix			
	ITS1	ITS2	ITS3	ITS4
ITS1	1	0.642	0.694	0.688
ITS2	0.642	1	0.608	0.907
ITS3	0.694	0.608	1	0.563
ITS4	0.688	0.907	0.563	1

**Table 4.19 (f): Co-relation Matrix for Selection of Employees**

	Inter-Item Correlation Matrix			
	SOE1	SOE2	SOE3	SOE4
SOE1	1	0.642	0.656	0.638
SOE2	0.642	1	0.634	0.628
SOE3	0.656	0.634	1	0.564
SOE4	0.638	0.628	0.564	1

**Table 4.19 (g): Correlation Matrix for Training and Development**

	Inter-Item Correlation Matrix			
	T&Dev;D1	T&Dev;D2	T&Dev;D3	T&Dev;D4
T&Dev;D1	1	0.624	0.67	0.68
T&Dev;D2	0.624	1	0.638	0.655
T&Dev;D3	0.67	0.638	1	0.637
T&Dev;D4	0.68	0.655	0.637	1

**Table 4.19 (h): Correlation Matrix for Performance Appraisal**

	Inter-Item Correlation Matrix			
	P&A1	P&A2	P&A3	P&A4
P&A1	1	0.594	0.567	0.55
P&A2	0.594	1	0.518	0.538
P&A3	0.567	0.518	1	0.501
P&A4	0.55	0.538	0.501	1

**Table 4.19 (i): Correlation Matrix for Compensation Reward System**

	Inter-Item Correlation Matrix			
	CRS1	CRS2	CRS3	CRS4
CRS1	1	0.62	0.714	0.728
CRS2	0.62	1	0.623	0.691
CRS3	0.714	0.623	1	0.588
CRS4	0.728	0.691	0.588	1

**Table 4.19 (j): Correlation Matrix for Socialization Process**

	Inter-Item Correlation Matrix			
	SOC1	SOC2	SOC3	SOC4
SOC1	1	0.746	0.708	0.692
SOC2	0.746	1	0.721	0.666
SOC3	0.708	0.721	1	0.67
SOC4	0.692	0.666	0.67	1

**Table 4.19 (k): Correlation Matrix for Externalization**

	Inter-Item Correlation Matrix			
	EXT1	EXT2	EXT3	EXT4
EXT1	1	0.506	0.615	0.625
EXT2	0.506	1	0.597	0.584
EXT3	0.615	0.597	1	0.513
EXT4	0.625	0.584	0.513	1

**Table 4.19 (l): Co-relation Matrix for Combination**

	Inter-Item Correlation Matrix			
	COM1	COM2	COM3	COM4
COM1	1	0.581	0.666	0.654
COM2	0.581	1	0.606	0.68
COM3	0.666	0.606	1	0.589
COM4	0.654	0.68	0.589	1

**Table 4.19 (m): Correlation Matrix for Internalization**

	<b>Inter-Item Correlation Matrix</b>			
	<b>INT1</b>	<b>INT2</b>	<b>INT3</b>	<b>INT4</b>
INT1	1	0.43	0.509	0.417
INT2	0.43	1	0.468	0.559
INT3	0.509	0.468	1	0.477
INT4	0.417	0.559	0.477	1

**Table 4.19(n): Correlation Matrix for Organisational Creativity**

	<b>Inter-Item Correlation Matrix</b>			
	<b>OC1</b>	<b>OC2</b>	<b>OC3</b>	<b>OC4</b>
OC1	1	0.453	0.494	0.448
OC2	0.453	1	0.442	0.493
OC3	0.494	0.442	1	0.391
OC4	0.448	0.493	0.391	1

**Table 4.19(o): Correlation Matrix for Organisational Performance**

	<b>Inter-Item Correlation Matrix</b>			
	<b>OP1</b>	<b>OP2</b>	<b>OP3</b>	<b>OP4</b>
OP1	1	0.421	0.485	0.564
OP2	0.421	1	0.432	0.515
OP3	0.485	0.432	1	0.379
OP4	0.564	0.515	0.379	1

Inter-Item correlations are an essential element in conducting an item analysis of a set of test questions. Inter-item correlations examine the extent to which scores on one item are related to scores on all other items in a scale. According to Cohen and Swerdlik (1998)<sup>i</sup>, if the values are higher than 0.40 it is acceptable, for further research.

The Table 4.19(a) depicts that the correlation Item- Item Correlation Matrix for Collaboration shows the values between 0.6-0.8 indicates the relationship is good.

The Table 4.19(b) depicts that the correlation Item- Item Correlation Matrix shows for Trust the values between 0.5-0.6 indicates the relationship is good for further research.

The Table 4.19(c) depicts that the correlation Item- Item Correlation Matrix shows T-Shaped Skills the values between 0.5-0.6 indicates the relationship is good for further research.

The table 4.19(d) depicts that the correlation Item- Item Correlation Matrix shows for Transformational leadership the values between 0.5-0.7 indicates the relationship is good for further research.

The Table 4.19(e) depicts that the correlation Item- Item Correlation Matrix shows for IT Support shows the values between 0.5-0.6 indicates the relationship is good for further research.

The Table 4.19(f) depicts that the correlation Item- Item Correlation Matrix shows for Selection of Employees shows the values between 0.5-0.6 indicates the relationship is good for further research.

The Table 4.19(g) depicts that the correlation Item- Item Correlation Matrix shows for Training & Development shows the values between 0.6-0.7 indicates the relationship is good for further research.

The Table 4.19(h) depicts that the correlation Item- Item Correlation Matrix shows for Performance Appraisal shows the values between 0.5-0.6 indicates the relationship is good for further research.

The Table 4.19(i) depicts that the correlation Item- Item Correlation Matrix shows for Compensation & Reward system shows the values between 0.5-0.8 indicates the relationship is good for further research.

The Table 4.19(j) depicts that the correlation Item- Item Correlation Matrix shows for Socialization Process shows the values between 0.6-0.8 indicates the relationship is good for further research.

The Table 4.19(k) depicts that the correlation Item- Item Correlation Matrix shows for Externalization shows the values between 0.5-0.7 indicates the relationship is good for further research.

The Table 4.19(l) depicts that the correlation Item- Item Correlation Matrix shows for Combination shows the values between 0.5-0.7 indicates the relationship is good for further research.

The Table 4.19(m) depicts that the correlation Item- Item Correlation Matrix shows for Internalization shows the values between 0.4-0.6 indicates the relationship is good for further research.

The Table 4.19(n) depicts that the correlation Item- Item Correlation Matrix shows for Organizational creativity shows the values between 0.3-0.6 indicates the relationship is identified for research, even though the value lies from 0.3 since the sample size is high, the justification of the sample arises from 0.3 which was supported by various researchers.

The Table 4.19(o) depicts that the correlation Item- Item Correlation Matrix shows for Organizational Performance shows the values between 0.3-0.6 indicates the relationship

is identified for research, even though the value lies from 0.3 since the sample size is high, the justification of the sample arises from 0.3 which was supported by various researchers.

#### **4.20 Scale Validity:**

Factor analysis is used to check whether or not the constructs in each concept are valid, and how much the items have loading on each construct.

Since the multi-item construct measures each variable, factor analysis with rotated factor matrix checks uni-dimensionality among the items; and those with factor loading values lower than 0.4; are to be eliminated (Stevens, 1992). This is shown in the following Tables.

#### **Rotated Component Matrix<sup>a</sup>**

**Table 4.20 (a): Collaboration and Trust: Organizational Culture**

	<b>Component</b>	<b>Component</b>
	<b>1</b>	<b>2</b>
COL2	<b>.907</b>	.007
COL1	<b>.896</b>	.034
COL3	<b>.866</b>	.000
COL4	<b>.851</b>	.045
TRU1	.007	<b>.868</b>
TRU4	-.002	<b>.852</b>
TRU2	.067	<b>.851</b>
TRU3	.013	<b>.844</b>

The above table depicts the Organisational Culture, that rotated matrix scores in the descending order from Col2, Col1, Col3, Col4; However for Trust, the rotated matrix scores are arranged in the descending order from Tur1, Tru4, Tru2 and Tru3 statements.

**Table 4.20(b): T-shaped skills: Rotated Component Matrix**

<b>Items</b>	<b>Components</b>
TSK4	.899
TSK1	.896
TSK3	.773
TSK2	.716

The above table says that T-shaped skills, the rotated component matrix scores in the descending order from TSK4, TSK1, TSK3, TSK2.

**Table 4.20(c): Transformational Leadership: Rotated Component Matrix**

Items	Components
TFL1	.870
TFL4	.865
TFL3	.837
TFL2	.831

The above table shows that Transformational leadership and its the rotated component matrix scores in the descending order from TF1, TF4, TF3, TF2

**Table 4.20(d): IT Support: Rotated Component Matrix**

Items	Components
ITS4	.911
ITS2	.910
ITS1	.862
ITS3	.809

The above table says that IT Support, the rotated component matrix scores in the descending order from ITS4, ITS2, ITS1, ITS3.

**Table 4.20(e): Human Resource Management: Rotated Component Matrix**

Items	Component1	Component 2	Component 3	Component 4
CRS1	<b>.889</b>	-.038	.002	.000
CRS4	<b>.872</b>	.015	.020	-.038
CRS2	<b>.848</b>	.002	.006	.001
CRS3	<b>.844</b>	.027	.038	.014
T&Dev;D1	-.010	<b>.863</b>	-.022	.096
T&Dev;D4	.006	<b>.858</b>	-.074	.098
T&Dev;D3	-.006	<b>.855</b>	.034	.040
T&Dev;D2	.016	<b>.852</b>	.041	-.013
SOE1	-.006	-.003	<b>.863</b>	.068
SOE2	.026	-.001	<b>.856</b>	.037
SOE3	.040	-.040	<b>.840</b>	.015
SOE4	.006	.026	<b>.829</b>	.075

<b>Items</b>	<b>Component1</b>	<b>Component 2</b>	<b>Component 3</b>	<b>Component 4</b>
P&A1	-.062	.079	.027	<b>.834</b>
P&A2	-.012	.030	.044	<b>.817</b>
P&A4	-.007	-.007	.081	<b>.795</b>
P&A3	.058	.108	.036	<b>.787</b>

The Table 4.20(e) shows that IT Support, the rotated component matrix scores in the descending order from Compensation reward system such as CRS1, CRS4, CRS2, CRS3; Training & Development, T&Deve, D1; T&Deve, D4, T&Deve, D3, T&Deve, D2; Selection of Employees, SOE1, SOE2, SOE3, SOE4; Performance Appraisal P&A1, P&A2, P&A4, P&A3.

**Table 4.20(f): Knowledge Creation Process Model: Rotated Component Matrix**

<b>Items</b>	<b>Component1</b>	<b>Component 2</b>	<b>Component 3</b>	<b>Component 4</b>
SOC1	<b>.890</b>	.023	.015	.081
SOC2	<b>.887</b>	.021	.046	.057
SOC3	<b>.877</b>	.017	.059	.042
SOC4	<b>.858</b>	.002	.003	.029
COM4	-.028	<b>.860</b>	.040	.058
COM1	.007	<b>.848</b>	.083	.061
COM2	.043	<b>.837</b>	.078	.045
COM3	.039	<b>.830</b>	.080	.103
EXT3	-.037	.019	<b>.833</b>	.030
EXT1	.045	.059	<b>.827</b>	.085
EXT4	.045	.117	<b>.814</b>	.041
EXT2	.063	.081	<b>.805</b>	.039
INT4	.064	.024	.015	<b>.790</b>
INT3	.073	.057	.018	<b>.784</b>
INT2	.022	.121	.101	<b>.777</b>
INT1	.027	.048	.053	<b>.745</b>

The above table shows Knowledge Creation Process, the rotated component matrix scores in the descending order from Compensation reward system such as Socialization, Combination, Externalization and Internalization scores

**Table 4.20(g): Organisational Creativity Component Matrix**

Items	Components
OC1	.782
OC2	.780
OC4	.757
OC3	.754

The above table says that Organisational Creativity, the component matrix scores in the descending order from OC1, OC2, OC3, and OC4.

**Table 4.20(h): Organisational Creativity: Component Matrix**

Items	Components
OP1	.804
OP4	.801
OP2	.761
OP3	.730

The above table says that Organisational Creativity, the component matrix scores in the descending order from OP1, OP4, OP2, and OP3.

#### **4.21 Multiple regression Analysis:**

##### **Introduction:**

Testing research hypotheses has been conducted through a series of analysis, particularly, multiple linear regression analyses and simple linear regression analysis of the survey data collected. Multivariate analysis as defined broadly by Hair et al. (1995, p. 5) refers to all statistical methods that simultaneously analyse multiple measurements on each individual or object under investigation. Particularly, multiple regression analysis is the appropriate method of analysis when the research problem involves a single metric dependent variable (Knowledge creation process) presumed to be related to one or more metric independent variables (knowledge management enablers) (Hair et al., 1995)<sup>ii</sup>

Since multiple regression works on prediction, it is used in this study to predict the changes in the knowledge creation process (dependent variable) in response to the changes in the combination of several knowledge management enablers (independent variables) and measure their contribution to the dependent variable.

Multiple regression analysis is used to predict the variation in the organizational creativity (dependent variable) as a result of the changes in the knowledge construct (knowledge conversion modes, (here they are independent variables) and measure its contribution to the dependent variable.



This study allows such as “Which of the multiple knowledge management enablers (independent variables) best predict knowledge creation process (dependent variable) then which of the knowledge conversion modes (independent variables) best predict organizational creativity. The underlying assumptions of regression analysis have been met by testing (Berry, 1993)<sup>iii</sup> the assumptions such as ‘Linearity’, ‘Homoscedaticity’, ‘Normality’ and ‘Multicollinearity’. We will use multiple regression method to test the gathered data from pilot survey. By making the most of above advantages of multiple regression analysis, we will evaluate the appropriateness of the proposed research model before we conduct the main survey. If we find some problems during multiple regression analysis, the research model will be modified according to the multiple regression statistics. It can reduce the variance and improve the correctness of our model, and then lead to highly reliable model when we examine it for main survey (Lee and Choi, 2003 & Migdadi, 2005)<sup>iv</sup>. The results of multiple regression analysis are shown in the following tables.

**Table 4.21(a): Multiple regression analysis for Organisational Culture vs Socialization**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.156	.024	.020	.9898222

a. Predictors: (Constant), Collaboration, Trust

**ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	11.336	2	5.668	5.785	.003
	Residual	451.664	461	.980		
	Total	463.000	463			

a. Predictors: (Constant), Collaboration, Trust

b. Dependent Variable: socialization

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-3.325E-7	.046		.000	1.000		
<b>Collaboration</b>	<b>.144</b>	<b>.046</b>	<b>.144</b>	<b>3.134</b>	<b>.002</b>	1.000	1.000
Trust	.061	.046	.061	1.322	.187	1.000	1.000

Table 4.21(a) depicts that significance ( $p < 0.01$ ), Therefore collaboration is directly supports to socialization. However, Trust ( $p > 0.1$ ) does not support socialization process.

**Table 4.21 (b): Multiple regression analysis for Organisational Culture vs Externalization**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.14	.022	.018	.9910129

a. Predictors: (Constant), Collaboration, Trust

**ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	10.249	2	5.124	5.218	.006 <sup>a</sup>
	Residual	452.751	461	.982		
	Total	463.000	463			

a. Predictors: (Constant), Collaboration, Trust

b. Dependent Variable: Externalization

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	1.339E-7	.046		.000	1.000		
Collaboration	.052	.046	.052	1.119	.264	1.000	1.000
<b>Trust</b>	<b>.140</b>	<b>.046</b>	<b>.140</b>	<b>3.030</b>	<b>.003</b>	1.000	1.000

a. Dependent Variable: Externalization

The table 4.21(b) gives collaboration ( $p > 0.01$ ) therefore the collaboration doesn't support externalization, However trust does support for externalization ( $p < 0.01$ ).

**Table 4.21 (c): Multiple regression analysis for Organisational Culture vs Combination**

**Model Summary**

Model		R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension0	1	.082	.007	.002	.9987871

a. Predictors: (Constant), Collaboration, Trust

**ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
	Regression	3.118	2	1.559	1.563	.100
1	Residual	459.882	461	.998		
	Total	463.000	463			

a. Dependent Variable: Combination  
 b. Independent Variable: Collaboration, Trust

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	6.675E-018	.046		.000	1.000		
1 Collaboration	.019	.046	.019	.401	.689	1.000	1.000
<b>Trust</b>	<b>.080</b>	<b>.046</b>	<b>.080</b>	<b>1.722</b>	<b>.086</b>	<b>1.000</b>	<b>1.000</b>

a. Dependent Variable: Combination; Independent Variable: Collaboration, Trust

The Table 4.21(c) depicts that ( $p > 0.1$ ), therefore collaboration doesn't support the combination, whereas trust ( $p < 0.1$ ) does support the combination mode.

**Table 4.21(d): Multiple regression analysis for Organisational culture vs Internalisation**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.206	.042	.038	.9806539

a. Predictors: (Constant), Collaboration, trust

**ANOVA**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	19.665	2	9.832	10.224	.000 <sup>a</sup>
	Residual	443.335	461	.962		
	Total	463.000	463			

a. Predictors: (Constant), Collaboration, trust

b. Dependent Variable: Internalisation

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-6.805E-8	.046		.000	1.000		
<b>Collaboration</b>	<b>.137</b>	<b>.046</b>	<b>.137</b>	<b>3.000</b>	<b>.003</b>	1.000	1.000
<b>Trust</b>	<b>.154</b>	<b>.046</b>	<b>.154</b>	<b>3.384</b>	<b>.001</b>	1.000	1.000

a. Dependent Variable: Internalisation

The Table 4.21(d) depicts that ( $p < 0.01$ ), collaboration and trust directly supports to Internalisation.

**Table 4.21 (e): Multiple regression analysis for Knowledge Creation Process vs Organisational Culture (Collaboration, Trust)**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Dimension01	.270	.073	.069	.9648866

a. Predictors: (Constant), Collaboration, Trust

**ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.806	2	16.903	18.156	.000
	Residual	429.194	461	.931		
	Total	463.000	463			

- a. Predictors: (Constant), Collaboration, Trust
- b. Dependent Variable: Knowledge Creation Process (kcrp)

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-1.342E-7	.045		.00	1.000		
<b>collaboration</b>	<b>.173</b>	<b>.045</b>	<b>.173</b>	<b>3.84</b>	<b>.000</b>	1.000	1.000
<b>Trust</b>	<b>.208</b>	<b>.045</b>	<b>.208</b>	<b>4.63</b>	<b>.000</b>	1.000	1.000

- a. Dependent Variable: Knowledge creation process (kcrp)

The above Table shows that organizational culture i.e., collaboration and trust ( $p < 0.01$ ), both will support to knowledge creation process.

**Table 4.21(f): Multiple regression analysis for T-shaped skills vs Socialisation**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.073	.005	.003	.9984035

- a. Predictors: (Constant), T-shaped skills

**ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.474	1	2.474	2.482	.116 <sup>a</sup>
	Residual	460.526	462	.997		
	Total	463.000	463			

- a. Predictors: (Constant), T-shaped skills
- b. Dependent Variable: Socialization

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-3.979E-7	.046	.073	.000	1.000	1.000	1.000
T-shaped skills	.073	.046		1.575	.116		

a. Dependent Variable: socialization

The above Table depicts that ( $p > 0.1$ ), therefore T-shaped skills doesn't support the Socialization process.

**Table 4.21(g): Multiple regression analysis for Externalization vs T-shaped skills**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.038	.001	-.001	1.0003521

a. Predictors: (Constant), T-shaped skills

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.675	1	.675	.674	.412 <sup>a</sup>
	Residual	462.325	462	1.001		
	Total	463.000	463			

- a. Predictors: (Constant), T-shaped skills
- b. Dependent Variable: Externalisation

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	6.975E-8	.046	.038	.000	1.000	1.000	1.000
T-shaped skills	.038	.046		.821	.412		

a. Dependent Variable: Externalisation

The above Table shows that ( $p > 0.1$ ), therefore T-shaped skills doesn't support the process Externalisation process.

**Table 4.21(h): Multiple regression analysis for Combination vs T-shaped skills**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.125	.016	.014	.9931670

a. Predictors: (Constant), T-shaped skills

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	7.292	1	7.292	7.393	.007 <sup>a</sup>
Residual	455.708	462	.986		
Total	463.000	463			

a. Predictors: (Constant), T-shaped skills  
 b. Dependent Variable: Combination

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	V I F
1 (Constant)	2.045E-7	.046	.125	.000	1.000	1.000	1.000
T-shaped skills	.125	.046		2.719			

a. Dependent Variable: Combination

The Table 4.21(h): says that ( $p < 0.01$ ), therefore T-shaped skills support the process combination process.

**Table 4.21 (i) Multiple regression analysis for T-shaped skills vs Internalization**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1 dimension0	.311	.096	.094	.9515833

a. Predictors: (Constant), T-shaped skills

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	44.654	1	44.654	49.314	.000 <sup>a</sup>
	Residual	418.346	462	.906		
	Total	463.000	463			

- a. Predictors: (Constant), T-shaped skills  
 b. Dependent Variable: Internalization

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-2.632E-7	.044	.311	.000	1.000	1.000	1.000
<b>T-shaped skills</b>	.311	.044		7.022			

- a. Dependent Variable: Internalization

The Table 4.21(i) shows that ( $p < 0.01$ ), therefore t-shaped skills support the process of Internalization.

**Table 4.21(j) multiple regression analysis for Knowledge Creation Process vs T-shaped Skills**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.254	.065	.063	.9681801

- a. Predictors: (Constant), T-shaped skills

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	29.934	1	29.934	31.934	.000 <sup>a</sup>
	Residual	433.066	462	.937		
	Total	463.000	463			

- a. Predictors: (Constant), T-shaped skills  
 b. Dependent Variable: Knowledge creation process (kcrp)



**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1.(Constant)	-3.251E-7	.045		.000	1.000	1.000	1.000
<b>T-shaped skills</b>	<b>.254</b>	<b>.045</b>	<b>.254</b>	<b>5.651</b>	<b>.000</b>		

a. Dependent Variable: Knowledge creation process

The Table 4.21(j), shows that T-shaped skills ( $p < 0.01$ ) are directly supports to knowledge creation process.

**Table 4.21(k) multiple regression analysis for Transformational leadership vs Socialization**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.403	.162	.161	.9161630

a. Predictors: (Constant), TFl

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	75.218	1	75.218	89.614	.000 <sup>a</sup>
Residual	387.782	462	.839		
<b>Total</b>	<b>463.000</b>	<b>463</b>			

- a. Predictors: (Constant), Transformational leadership
- b. Dependent Variable: soc

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1.(Constant)	-5.662E-7	.043		.000	1.000	1.000	1.000
<b>Transformational leadership</b>	<b>.403</b>	<b>.043</b>	<b>.403</b>	<b>9.466</b>	<b>.000</b>		

a. Dependent Variable: Socialization

The Table 4.21(k) depicts that transformational leadership ( $p < 0.01$ ) directly supports socialization process.

**Table 4.21 (l) Multiple regression analysis for Transformational leadership vs Externalization**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.291	.085	.083	.9577042

a. Predictors: (Constant), Transformational Leadership

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	39.255	1	39.255	42.799	.000 <sup>a</sup>
Residual	423.745	462	.917		
Total	463.000	463			

a. Predictors: (Constant), Transformational Leadership  
 b. Dependent Variable: externalization

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-5.813E-8	.044		.000	1.000		
<b>Transformational leadership</b>	<b>.291</b>	<b>.045</b>	<b>.291</b>	<b>6.542</b>	<b>.000</b>	1.000	1.000

a. Dependent Variable: externalization

The Table 4.21(l) it depicts that Transformational leadership directly supports externalization process.

**Table 4.21(m) multiple regression analysis for Transformational leadership vs Combination**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.073	.005	.003	.9983991

a. Predictors: (Constant), Transformational leadership

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	2.478	1	2.478	2.486	.116
	Residual	460.522	462	.997		
	Total	463.000	463			

a. Predictors: (Constant), Transformational Leadership  
 b. Dependent Variable: Combination

**Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.224E-7	.046		.000	1.000
	Transformational leadership	.073	.046	.073	1.577	.116

a. Dependent Variable: combination

The above Table says that Transformational leadership ( $p > 0.01$ ) doesn't support the combination process.

**Table 4.21(n) multiple regression analysis for Transformational leadership vs Internalization**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.127	.016	.014	.9929839

a. Predictors: (Constant), Transformational Leadership

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	7.460	1	7.460	7.566	.006
	Residual	455.540	462	.986		
	Total	463.000	463			

- a. Predictors: (Constant), Transformational Leadership  
 b. Dependent Variable: Internalization

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-1.922E-7	.046		.000	1.000
<b>TFI</b>	<b>.127</b>	<b>.046</b>	<b>.127</b>	<b>2.751</b>	<b>.006</b>

a. Dependent Variable: Internalization

Table 4.21(n) shows that Transformational leadership ( $p < 0.01$ ) directly supports to Internalization process.

**Table 4.21(o) multiple regression analysis for Knowledge creation process vs Transformational leadership**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.463	.214	.213	.8873708

a. Predictors: (Constant), Transformational Leadership

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	99.209	1	99.209	125.991	.000
	Residual	363.791	462	.787		
	Total	463.000	463			

- a. Predictors: (Constant), Transformational Leadership  
 b. Dependent Variable: Knowledge Creation Process (KCRP)

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1(Constant)	-4.450E-7	.041		.000	1.000	1.000	1.000
<b>Transformational leadership</b>	<b>.463</b>	<b>.041</b>	<b>.463</b>	<b>11.225</b>	<b>.000</b>		

a. Dependent Variable: Knowledge creation process

The Table 4.21(o) shows that, Transformational leadership ( $p < 0.01$ ) directly supports that Knowledge creation process.

**Table 4.21(p) Multiple regression analysis for IT support vs Socialization**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.059	.003	.001	.9993336

a. Predictors: (Constant), IT support

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	1.615	1	1.615	1.618	.204 <sup>a</sup>
Residual	461.384	462	.999		
Total	463.000	463			

- a. Predictors: (Constant), IT support
- b. Dependent Variable: socialization

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	-3.511E-7	.046		.000	1.000
IT support	.059	.046	.059	1.272	.204

a. Dependent Variable: socialization

The Table 4.21(p) says that IT ( $p > 0.01$ ) doesn't support the Socialization process

**Table 4.21 (q) Multiple regression analysis for IT support vs Externalization**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.091 <sup>a</sup>	.008	.006	.9969584

a. Predictors: (Constant), IT Support

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	3.806	1	3.806	3.829	.051
Residual	459.194	462	.994		
Total	463.000	463			

a. Predictors: (Constant), IT support  
 b. Dependent Variable: Externalization

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.097E-7	.046		.000	1.000
<b>IT support</b>	<b>.091</b>	<b>.046</b>	<b>.091</b>	<b>1.957</b>	<b>.051</b>

a. Dependent Variable: ext.

The above Table shows that IT support ( $p < 0.1$ ) directly to externalization process.

**Table 4.21(r) Multiple regression analysis for IT support vs Combination**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.088	.008	.006	.9971953

a. Predictors: (Constant), It support

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	3.588	1	3.588	3.608	.058
	Residual	459.412	462	.994		
	Total	463.000	463			

- a. Predictors: (Constant), IT support
- b. Dependent Variable: Combination

#### Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1(Constant)	2.814E-7	.046		.000	1.000
<b>IT support</b>	<b>.088</b>	<b>.046</b>	<b>.088</b>	<b>1.899</b>	<b>.058</b>

- a. Dependent Variable: Combination

The Table 4.21(r) shows that IT support directly supports ( $p < 0.1$ ) to combination process.

**Table 4.21(s) multiple regression analysis for IT Support vs Internalization**

#### Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.156	.024	.022	.9888858

#### ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	11.213	1	11.213	11.466	.001
	Residual	451.788	462	.978		
	Total	463.000	463			

- a. Predictors: (Constant), IT Support
- b. Dependent Variable: Internalisation

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-8.906E-8	.046		.000	1.000
<b>IT support</b>	<b>.156</b>	<b>.046</b>	<b>.156</b>	<b>3.386</b>	<b>.001</b>

a. Dependent Variable: Internalisation.

The Table 4.21(s) says that IT directly supports ( $p < 0.01$ ) to the Internalisation process.

**Table 4.21(t) Multiple regression analysis for Knowledge creation process vs IT Support**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.189	.036	.034	.9830830

a. Predictors: (Constant), IT Support.

**ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	16.499	1	16.499	17.072	.000
Residual	446.501	462	.966		
Total	463.000	463			

- a. Predictors: (Constant), IT Support
- b. Dependent Variable: Knowledge Creation Process(kcrp)

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-1.667E-7	.046		.000	1.000		
<b>IT support</b>	<b>.189</b>	<b>.046</b>	<b>.189</b>	<b>4.132</b>	<b>.000</b>	1.000	1.000

a. Dependent Variable: Knowledge creation process.



The Table 4.21(t) says that IT support ( $p < 0.01$ ) directly proportional to knowledge creation process.

**Table 4.21(u) Multiple regression analysis for HRM vs Socialisation Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.273	.074	.066	.9662801

a. Predictors: (Constant), selection of employees, training & development, compensation reward system and performance appraisal b. Dependent Variable: socialization.

**ANOVA**

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	34.433	4	8.608	9.219	.000 <sup>a</sup>
Residual	428.567	459	.934		
Total	463.000	463			

a. Predictors: (Constant), selection of employees, training & development, compensation reward system and performance appraisal b. Dependent Variable: socialization.

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-3.904E-7	.045		.000	1.000
<b>Selection of employees</b>	<b>.130</b>	<b>.045</b>	<b>.130</b>	<b>2.891</b>	<b>.004</b>
<b>Training &amp; Development</b>	<b>.141</b>	<b>.045</b>	<b>.141</b>	<b>3.141</b>	<b>.002</b>
Compensation & reward system	.065	.045	.065	1.439	.151
<b>Performance Appraisal</b>	<b>.183</b>	<b>.045</b>	<b>.183</b>	<b>4.072</b>	<b>.000</b>

a. Dependent Variable: socialization.

The Table 4.21(u) shows that Selection of employees, Training & Development and Performance appraisal will have significance ( $p < 0.01$ ). Therefore selection of employees, training & development and performance appraisal directly proportional to socialisation

process. However compensation reward system ( $p>0.1$ ) was not supported to the socialisation process.

**Table 4.21(v) Multiple regression analysis for HRM vs Externalisation**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.135	.018	.010	.9951629

Predictors: (Constant), selection of employees, training & development, compensation reward system and performance appraisal.

**ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.430	4	2.107	2.128	.076
	Residual	454.570	459	.990		
	Total	463.000	463			

- a. Predictors: (Constant), selection of employees, training & development, compensation reward system and performance appraisal.
- b. Dependent Variable: Externalisation.

**Coefficients**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	6.432E-8	.046		.000	1.000
	Selection of Employees	.039	.046	.039	.846	.398
	Training & Development	.043	.046	.043	.934	.351

- a. Dependent Variable: Externalisation.

The table 4.21(v) depicts that Selection of employees, Training & Development, Compensation reward system will have significance( $p>0.1$ ) doesn't support the Externalisation process. However, Performance appraisal will support directly to the Externalization process.

**Table 4.21(w) Multiple regression analysis for HRM vs Combination**

The Table below 4.21(w), shows that Selection of employees, Training & development, and Performance Appraisal ( $p>0.1$ ) doesn't support the Combination process. However, Compensation and Reward system directly supports to the combination process.

**Table 4.21(w) Multiple regression analysis for HRM vs Combination Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.110	.012	.003	.9982631

Predictors: (Constant), selection of employees, training & development, compensation reward system and performance appraisal.

#### ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	5.593	4	1.398	1.403	0.1
Residual	457.407	459	.997		
Total	463.000	463			

- Predictors: (Constant), selection of employees, training & development, compensation reward system and performance appraisal.
- Dependent Variable: combination.

#### Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.569E-7	.046		.000	1.000
	Selection of employees	.039	.046	.039	.844	.399
	Training & Development	.013	.046	.013	.285	.775
	<b>Compensation &amp; reward system</b>	<b>.079</b>	<b>.046</b>	<b>.079</b>	<b>1.707</b>	<b>.089</b>
	Performance Appraisal	.064	.046	.064	1.380	.168

a. Dependent Variable: combination

**Table 4.21(x) Multiple regression analysis for HRM vs Internalisation Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.267 <sup>a</sup>	.071	.063	.9680221

a. Predictors: (Constant), selection of employees, training & development, compensation reward system and performance appraisal.

#### ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	32.887	4	8.222	8.774	.000 <sup>a</sup>
Residual	430.114	459	.937		
Total	463.000	463			

- a. Predictors: (Constant), selection of employees, training & development, compensation reward system and performance appraisal.  
 b. Dependent Variable: Internalisation.

#### Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-1.171E-7	.045		.000	1.000
Selection of Employees	-.002	.045	-.002	-.034	.973
<b>Training &amp; Development</b>	<b>.216</b>	<b>.045</b>	<b>.216</b>	<b>4.794</b>	<b>.000</b>
<b>Compensation &amp; Reward system</b>	<b>.118</b>	<b>.045</b>	<b>.118</b>	<b>2.615</b>	<b>.009</b>
<b>Performance Appraisal</b>	<b>.103</b>	<b>.045</b>	<b>.103</b>	<b>2.296</b>	<b>.022</b>

a. Dependent Variable: Internalisation

The above table 4.21(x), it depicts that selection of employees( $p>0.1$ ) doesn't support the Internalisation process, whereas training & development ( $p<0.01$ ), compensation reward system( $p<0.01$ ) and performance appraisal( $p<0.05$ ) supports the Internalisation process.

**Table 4.21(y) Multiple regression analysis for KCP vs HRM practices Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension0 <sub>1</sub>	.361 <sup>a</sup>	.130	.123	.9365645

a. Predictors: (Constant), selection of employees, training & development, compensation reward system and performance appraisal.

#### ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	60.387	4	15.097	17.211	.000 <sup>a</sup>
Residual	402.613	459	.877		
Total	463.000	463			

- a. Predictors: (Constant), selection of employees, training & development, compensation reward system and performance appraisal  
 b. Dependent Variable: Knowledge creation process

#### Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-2.360E-7	.043		.000	1.000		
<b>Compensation &amp; reward system</b>	.143	.044	.143	3.288	.001	1.000	1.000
<b>Training &amp; development</b>	.199	.044	.199	4.565	.000	1.000	1.000
<b>Selection of employees</b>	.112	.044	.112	2.574	.010	1.000	1.000
<b>Performance appraisal</b>	.241	.044	.241	5.529	.000	1.000	1.000

a. Dependent Variable: knowledge creation process.

The Table 4.21(y) says that compensation reward system, training & development, selection of employees and performance appraisal will have significance ( $p < 0.01$ ) directly supports the knowledge creation process.

**Table 4.21 (z) Multiple regression analysis for Knowledge Creation Process vs Organisational creativity**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.488	.238	.237	.8737427

a. Predictors: (Constant), Knowledge creation process.

**ANOVA**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	110.297	1	110.297	144.477	.000
Residual	352.703	462	.763		
Total	463.000	463			

a. Predictors: (Constant), Knowledge creation process.  
 b. Dependent variable: Organisational creativity.

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1(Constant)	-6.060E-7	.041	.488	.000	1.000	1.000	1.000
<b>Knowledge creation process</b>	<b>.488</b>	<b>.041</b>		<b>12.020</b>	<b>.000</b>		

a. Dependent Variable: organizational creativity.

The Table 4.21(z), it depicts that knowledge creation process ( $p < 0.01$ ) directly supports organizational creativity.

**4.21(z,i) Multiple regression analysis for Organizational creativity vs organizational performance**

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
dimension01	.240 <sup>a</sup>	.058	.056	.9717840

a. Predictors: (Constant), Organizational creativity.

**ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	26.704	1	26.704	28.278	.000 <sup>a</sup>
	Residual	436.296	462	.944		
	Total	463.001	463			

- a. Predictors: (Constant), Organisational creativity.
- b. Dependent Variable: Organisational performance.

**Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1(Constant)	1.162E-	.045	.240	.000	1.000	1.000	1.000
	6						
<b>Organisational creativity</b>	<b>.240</b>	<b>.045</b>		<b>5.318</b>	<b>.000</b>		

- a. Dependent Variable: operational performance.

The above table says that organisational creativity(p<0.01) directly supports the organisational performance.

**Table 4.22 Perception of the Managers on Organizational Culture wrt Collaboration:**

Sr. No	Items	Rating	25 Years	26-40 Years	41-55 Years
			10.60 %	36.10 %	53.30 %
1	Our organization members are supportive	S.A	18.36735	19.16168	18.95161
		A NO	30.61224	29.94012	30.64516
		D SD	34.69388	34.73054	34.27419
			10.20408	9.580838	9.274194
			6.122449	6.586826	6.854839
		Total	100	100	100
2	Our organization members are helpful	S.A	14.28571	15.56886	15.32258
		A NO	38.77551	40.71856	40.32258
		D SD	32.65306	29.94012	30.24194
			10.20408	8.982036	9.274194
			4.081633	4.790419	4.83871
		Total	100	100	100

Sr. No	Items	Rating	25 Years	26-40 Years	41-55 Years
			10.60 %	36.10 %	53.30 %
3	There is a willingness to collaborate across organizational units within our organization	S.A	12.2449	10.17964	10.48387
		A	42.85714	44.31138	43.95161
		NO	28.57143	31.13772	30.64516
		D	12.2449	9.580838	10.48387
		SD	4.081633	4.790419	4.435484
		Total	100	100	100
4	There is a willingness to accept responsibility for failure	S.A	12.2449	11.37725	11.29032
		A	44.98796	46.70659	46.37097
		NO	24.4898	25.7485	25.08645
		D	14.28571	10.77844	11.29032
		SD	4.081633	5.389222	5.241935
		Total	100	100	100

Table 4.22 shows the age wise analysis, the assessment of the study shows that the age upto 25 years , 18.36% of respondents Strongly Agreed that “ Our organization members are supportive”, 30.61% Agreed, 34.69% No Opinion,10.20% Disagreed,6.12% Strongly Disagreed; The age group between 26- 40 years , 19.16% of respondents Strongly agreed for this statement, 29.94% Agreed, 34.73% No Opinion, 9.58% Disagreed, 6.58% Strongly Disagreed; The age group between 41-55 years, 18.95% of respondents Strongly Agreed for this statement, 30.64% Agreed, 34.27% No Opinion, 9.27% Disagreed, 6.85% Strongly Disagreed.

**Table 4.23 Perception of the Managers on Organizational Culture wrt Trust:**

Sr. No	Items	Rating	25 Years	26-40 Years	41-55 Years
			10.60 %	36.10 %	53.30 %
1	Our company members have reciprocal faith in other members intentions and behaviors	S.A	8.163265	7.185629	7.258065
		A	32.65306	35.92814	36.29032
		NO	40.81633	41.31737	41.12903
		D	12.2449	10.17964	10.08065
		SD	6.122449	5.389222	5.224193
		Total	100	100	100
2	Our company members have reciprocal faith in others ability	S.A	6.122449	6.586826	6.451613
		A	34.69388	34.13174	33.87097
		NO	42.85714	42.51497	43.14516
		D	12.2449	12.57485	12.09677
		SD	4.081633	4.191617	4.435484
		Total	100	100	100



Sr. No	Items	Rating	25 Years	26-40 Years	41-55 Years
			10.60 %	36.10 %	53.30 %
3	Our company members have reciprocal faith in others behaviors to work toward organizational goals.	S.A	6.122449	6.586826	6.854839
		A	28.57143	28.14371	28.22581
		NO	48.97959	48.50229	48.3871
		D	14.28571	13.77246	13.70968
		SD	2.040816	2.994012	2.822581
		Total	100	100	100
4	Our company members have reciprocal faith in others decision toward organizational interests than individual interests.	S.A	6.122449	5.988024	6.048387
		A	42.85714	43.71257	43.54839
		NO	36.73468	37.12575	36.69355
		D	10.20408	9.580838	9.677419
		SD	4.081633	3.592814	4.032258
		Total	100	100	100

Table 4.23 shows the age wise analysis, the assessment of the study shows that the age upto 25 years, 8.16% of respondents Strongly Agreed that “ Our company members have reciprocal faith in other members intentions and behaviours”,32.65% Agreed, 40.81% No Opinion, 12.24% Disagreed, 6.12% Strongly Disagreed; The age group between 26-40 years, 7.18% of respondents Strongly Agreed for this statement, 35.92% Agreed, 41.31% No opinion, 10.17% Disagreed, 5.38% Strongly Disagreed; The age group between 41-55 years , 7.25% of respondents Strongly Agreed for this statement, 36.29% Agreed, 41.12% No Opinion, 10.08% Disagree, 5.24% Strongly Disagreed.

**Table 4.24 Perception of the Managers on People wrt T- Shaped Skills**

Sr. No	Items	Rating	25 Years	26-40 Years	41-55 Years
			10.60 %	36.10 %	53.30 %
1	Our company members can understand not only their own tasks but also others tasks	S.A	10.20408	8.982036	8.870968
		A	42.85714	44.91018	44.75806
		NO	28.57143	28.14371	28.22581
		D	12.2449	11.97605	12.09677
		SD	6.122449	5.988024	6.048387
		Total	100	100	100

Sr. No	Items	Rating	25 Years	26-40 Years	41-55 Years
			10.60 %	36.10 %	53.30 %
2	Our company members can make suggestion about others task	S.A	14.28571	14.97006	14.91935
		A	32.65306	34.13174	33.87097
		NO	34.69388	32.93413	32.66129
		D	12.2449	11.37725	11.69355
		SD	6.122449	6.586826	6.854839
		Total	100	100	100
3	Our company members can communicate well not only with their department members but also with other department members	S.A	6.122449	7.185629	6.854839
		A	48.97959	49.1018	49.19355
		NO	28.57143	28.74251	28.62903
		D	10.20408	9.580838	10.08065
		SD	6.122449	5.389222	5.241935
		Total	100	100	100
4	Our company members are specialists in their own part	S.A	8.163265	8.383234	8.467742
		A	42.85714	43.71257	43.54839
		NO	28.57143	29.34132	29.83871
		D	14.28571	11.97605	11.29032
		SD	6.122449	6.586826	6.854839
		Total	100	100	100

Table 4.24 shows the age wise analysis, the assessment of the study shows that the age upto 25 years, 10.20% of respondents Strongly Agreed that “ Our company members can understand not only their own tasks but also others tasks”,42.85% Agreed, 28.57% No Opinion, 12.24% Disagreed, 6.12% Strongly Disagreed; The age group between 26-40 years, 8.98% of respondents Strongly Agreed for this statement, 44.91% Agreed, 28.14% No opinion, 11.97% Disagreed, 5.98% Strongly Disagreed; The age group between 41-55 years , 8.87% of respondents Strongly Agreed for this statement, 44.75% Agreed, 28.22% No Opinion, 12.09% Disagree, 6.04% Strongly Disagreed.

**Table 4.25 Perception of the Managers wrt Transformational Leadership:**

Sr. No	Items	Rating	25 Years	26-40 Years	41-55 Years
			10.60 %	36.10 %	53.30 %
1	Our leadership engages in activities involving considerable personal risk in pursuing organizational objectives.	S.A	10.20408	9.580838	9.274194
		A	28.57148	25.7485	25.40323
		NO	42.85714	46.10778	45.96774
		D	14.28571	14.37126	14.91935
		SD	4.081633	4.191617	4.435484
		Total	100	100	100

Sr. No	Items	Rating	25 Years		26-40 Years	41-55 Years
			10.60	%	36.10 %	53.30 %
2	Our leadership makes me aware of strongly held values, ideals and aspirations which are shared in common.	S.A	4.081633		4.191617	4.032258
		A	32.65306		32.33533	32.66129
		NO	46.93878		46.70659	47.17742
		D	14.28571		14.37126	14.1129
		SD	2.040816		2.39521	2.016129
		Total	100		100	100
3	Our leadership encourages creativity and new idea generation	S.A	6.122449		5.389222	5.241935
		A	34.69388		35.92814	35.48387
		NO	42.85714		42.51497	43.14516
		D	14.28571		13.17365	12.90323
		SD	2.040816		2.994012	3.225806
		Total	100		100	100
4	Our leadership encourages two way exchange in communication	S.A	6.122449		5.988024	5.645161
		A	32.85714		33.53293	33.06452
		NO	42.85714		43.71257	44.35484
		D	14.28571		11.97065	12.5
		SD	4.081633		4.790419	4.435484
		Total	100		100	100

The above Table shows the age wise analysis, the assessment of the study shows that the age upto 25 years, 10.20% of respondents Strongly Agreed that “ Our leadership engages in activities involving considerable personal risk in pursuing organizational objectives”,28.57% Agreed, 42.85% No Opinion, 14.28% Disagreed,4.08% Strongly Disagreed; The age group between 26-40 years, 9.58% of respondents Strongly Agreed for this statement, 25.74% Agreed, 46.10% No opinion, 14.37% Disagreed, 4.19% Strongly Disagreed; The age group between 41-55 years , 9.27% of respondents Strongly Agreed for this statement, 25.40% Agreed, 45.96% No Opinion, 14.91% Disagree, 4.43% Strongly Disagreed.

**Table 4.26 Perception of the Managers wrt IT Support:**

Sr. No	Items	Rating	25 Years		26-40 Years	41-55 Years
			10.60	%	36.10 %	53.30 %
1	Our company provides IT support for communications among organization members	S.A	6.122449		5.389222	5.241935
		A	28.87143		29.34132	29.43548
		NOD	40.81633		41.31737	40.72581
		SD	16.32653		15.56886	16.12903
		Total	8.163265		8.383234	8.467742
			100		100	100
2	Our company provides IT support for searching for and accessing necessary	S.A	2.040816		2.39521	2.419355
		A	28.57143		27.54491	27.41935
		NO	48.91595		47.30539	47.58065
		D	14.28571		14.97006	14.91935
		SD	6.122449		7.784431	7.66129

Sr. No	Items	Rating	25 Years	26-40 Years	41-55 Years
			10.60 %	36.10 %	53.30 %
	information	Total	100	100	100
3	Our company provides IT support for simulation and prediction	S.A	4.081633	3.592814	3.629032
		A	32.65306	32.33533	31.85484
		NO	40.81633	41.91617	41.93548
		D	18.36735	17.36527	17.74194
		SD	4.081633	4.790419	4.83871
		Total	100	100	100
4	Our company provides IT support for systematic storing	S.A	2.040816	2.39521	2.016129
		A	30.61224	29.34132	29.03226
		NO	46.93878	46.10778	45.96774
		D	14.28571	13.77246	14.91935
		SD	6.122449	8.383234	8.064516
		Total	100	100	100

The above table shows the age wise analysis, the assessment of the study shows that the age upto 25 years, 6.12% of respondents Strongly Agreed that “Our company provides IT support for communications among organization members”,28.57% Agreed, 40.81% No Opinion, 16.32% Disagreed,8.16% Strongly Disagreed; The age group between 26-40 years, 5.38% of respondents Strongly Agreed for this statement, 29.34% Agreed, 41.31% No opinion, 15.56% Disagreed, 8.38% Strongly Disagreed; The age group between 41-55 years , 5.24% of respondents Strongly Agreed for this statement, 29.43% Agreed, 40.72% No Opinion, 16.12% Disagree, 8.46% Strongly Disagreed.

**Table 4.27 Perception of the Managers on HRM wrt Selection of Employees:**

Sr. No	Items	Rating	25 Years	26-40 Years	41-55 Years
			10.60 %	36.10 %	53.30 %
1	Our Organization encourages multilingual ability for selection of employees.	S.AA NOD	10.20408	7.185629	6.854839
		SD	38.77551	40.71856	40.32258
		Total	32.65306	35.92814	36.69355
			14.28571	11.37725	11.29032
			4.081633	4.790419	4.83871
		Total	100	100	100
2	Our Organization selects the members who works in a team or group efficiently	S.A	4.081633	4.191617	4.435484
		A	42.85714	43.11377	43.14516
		NO	38.77551	39.52096	39.51613
		D	10.20408	8.383234	8.467742
		SD	4.081633	4.790419	4.435484
		Total	100	100	100
3	In our Organization, people who exhibit interest in learning are preferred	S.A	2.040816	2.39521	2.016129
		A	46.93878	44.31138	44.35484
		NO	34.69388	36.52695	36.69355
		D	14.28571	13.77246	14.1129
		SD	2.040816	2.994012	2.822581
		Total	100	100	100

Sr. No	Items	Rating	25 Years	26-40 Years	41-55 Years
			10.60 %	36.10 %	53.30 %
4	Our organization considers related professional experience for employees	S.AA NOD	4.081633	4.191617	4.435484
		SD	32.65306	30.53892	30.64516
		Total	46.93878	49.7006	49.19355
			14.28571	12.57485	12.5
			2.040816	2.994012	3.225806
			100	100	100

The above table shows the age wise analysis, the assessment of the study shows that the age upto 25 years, 10.20% of respondents Strongly Agreed that “Our company encourages multilingual ability for the selection of employees”,38.77% Agreed, 32.65% No Opinion, 14.28% Disagreed,4.08% Strongly Disagreed; The age group between 26-40 years, 7.18% of respondents Strongly Agreed for this statement,40.71% Agreed, 35.92% No opinion, 11.37% Disagreed, 4.79% Strongly Disagreed; The age group between 41-55 years , 6.85% of respondents Strongly Agreed for this statement, 40.32% Agreed, 36.69% No Opinion, 11.29% Disagree, 4.83% Strongly Disagreed.

**Table 4.28 Perception of the Managers on HRM wrt Training & Development:**

Sr. No	Items	Rating	25 Years	26-40 Years	41-55 Years
			10.60 %	36.10 %	53.30 %
1	Our Organization rewardsand recognizes trained staff	S.A	6.122449	5.389222	5.645161
		A	34.69388	35.32934	35.08065
		NO	40.81633	41.91617	41.93548
		D	12.2449	10.77844	10.8871
		SD	6.122449	6.586826	6.411613
		Total	100	100	100
2	Our Organization encourages employees to participate in internal and external new learning opportunities such as conferences, seminars, university courses, training etc	S.A	2.040816	2.994012	2.822581
		A	34.69388	35.32934	35.08065
		NO	42.85714	44.31138	44.35484
		D	14.28571	12.57485	12.5
		SD	6.122449	4.790419	5.241935
		Total	100	100	100
3	Our Organization provides training in skills development such as documentation, creative thinking, problem solving, communication, teambuilding etc	S.A	2.040816	2.39521	2.419355
		A	42.85714	44.31138	43.95161
		NO	34.69388	34.13174	33.87097
		D	16.32653	15.56886	15.72581
		SD	4.081633	3.592814	4.032258
		Total	100	100	100
4	Our company provides training by presenting various contexts and many examples in which	S.A	8.163265	5.389222	5.241935
		A	36.73469	39.52096	39.51613
		NO	36.73469	38.92216	39.51613
		D	12.2449	10.77844	10.48387

Sr. No	Items	Rating	25 Years	26-40 Years	41-55 Years
			10.60 %	36.10 %	53.30 %
	trainee can expect to use the skills and knowledge in real time environment	SD Total	6.12249 100	5.389222 100	5.241935 100

The above table shows the age wise analysis, the assessment of the study shows that the age upto 25 years, 6.12% of respondents Strongly Agreed that “Our organization rewards and recognizes trained staff”, 34.69% Agreed, 40.81% No Opinion, 12.24% Disagreed, 6.12% Strongly Disagreed; The age group between 26-40 years, 5.38% of respondents Strongly Agreed for this statement, 35.32% Agreed, 41.91% No opinion, 10.77% Disagreed, 6.58% Strongly Disagreed; The age group between 41-55 years , 5.64% of respondents Strongly Agreed for this statement, 35.08% Agreed, 41.93% No Opinion, 10.88% Disagree, 6.41% Strongly Disagreed.

**Table 4.29 Perceptions of the Managers on HRM wrt. Performance Appraisal**

Sr. No	Items	Rating	25 Years	26-40 Years	41-55 Years
			10.60 %	36.10 %	53.30 %
1	Our company provides feedback which is useful for improvement	S.A	6.122449	7.784431	7.66129
		A	44.89796	45.50898	45.16129
		NO	32.65306	32.93413	32.25806
		D	12.2449	11.37725	11.29032
		SD	4.081633	2.39521	3.629032
		Total	100	100	100
2	Our company provides feedback which is used for ratings, reward and sanctions	S.A	2.040816	2.994012	2.822581
		A	48.97959	49.7006	49.19355
		NO	32.65306	31.73653	31.85484
		D	12.2449	11.97605	12.09677
		SD	4.081633	3.592814	4.032258
		Total	100	100	100
3	Our company collects feedback based on personal characteristics not relevant to work	S.A	6.122449	5.389222	5.241935
		A	40.81633	41.31737	41.12903
		NO	36.73469	38.92216	38.30645
		D	12.2449	11.37725	11.69355
		SD	4.081633	2.994012	3.629032
		Total	100	100	100
4	Our company collects feedback	S.A	6.122449	6.586826	6.451613
		A	34.69388	33.53293	33.06452
		NO	40.81633	43.11377	42.74194

Sr. No	Items	Rating	25 Years	26-40 Years	41-55 Years
			10.60 %	36.10 %	53.30 %
	based on the key process indicators	D	14.28571	13.17365	13.70968
		SD	4.081633	3.592814	4.032258
		Total	100	100	100

The above table shows the age wise analysis, the assessment of the study shows that the age upto 25 years, 6.12% of respondents Strongly Agreed that “Our company provides feedback which is useful for improvement”, 44.89% Agreed, 32.65% No Opinion, 12.24% Disagreed, 4.08% Strongly Disagreed; The age group between 26-40 years, 7.78% of respondents Strongly Agreed for this statement, 45.50% Agreed, 32.93% No opinion, 11.37% Disagreed, 2.39% Strongly Disagreed; The age group between 41-55 years , 7.66% of respondents Strongly Agreed for this statement, 45.16% Agreed, 32.25% No Opinion, 11.29% Disagree, 3.62% Strongly Disagreed.

**Table 4.30: Perception of the Managers on HRM wrt : Compensation & Reward System**

Sr. No	Items	Rating	25 Years	26-40 Years	41-55 Years
			10.60 %	36.10 %	53.30 %
1	Our organization rewards for measurable competencies	S.A	12.2449	11.37725	11.69355
		A	28.57143	26.34731	25.80645
		NO	40.81633	43.71257	43.54839
		D	14.28571	13.77246	14.1129
		SD	4.081633	4.790419	4.83871
		Total	100	100	100
2	In Our Organization employees are rewarded for new ideas	S.A	8.163265	7.784431	8.064516
		A	34.69388	35.32934	35.08065
		NO	40.81633	40.71856	40.32258
		D	14.28571	13.17365	13.70968
		SD	2.040816	2.994012	2.822581
		Total	100	100	100
3	Our organization keeps group incentives clear and simple	S.A	8.163265	8.383234	8.064516
		A	36.73469	34.13174	34.67742
		NO	36.73469	41.31737	41.12903
		D	14.28571	14.37126	14.51613
		SD	4.081633	1.796407	1.612903
		Total	100	100	100
4	Our Organization rewards those who brings improvement in work or output	S.A	12.2449	10.77844	10.48387
		A	28.57143	29.34132	29.03226
		NO	42.85714	44.91018	45.56452
		D	12.2449	10.77844	10.48387
		SD	4.081633	4.191617	4.435484
		Total	100	100	100

From the above table shows the age wise analysis, the assessment of the study shows that the age upto 25 years, 12.24% of respondents Strongly Agreed that “Our organization rewards for measurable competencies ”, 28.57% Agreed, 40.81% No Opinion, 14.28% Disagreed,4.08% Strongly Disagreed; The age group between 26-40 years, 11.37% of respondents Strongly Agreed for this statement,26.34% Agreed, 43.71% No opinion, 13.77% Disagreed, 4.79% Strongly Disagreed; The age group between 41-55 years , 11.69% of respondents Strongly Agreed for this statement, 25.80% Agreed, 43.54% No Opinion, 14.11% Disagree, 4.83% Strongly Disagreed.

**Table 4.31 Perception of the Managers on KCP wrt Socialization**

Sr. No	Items	Rating	25 Years		26-40 Years	41-55 Years
			10.60	%	36.10 %	53.30 %
1	Our company stresses sharing experience with suppliers and customers	S.A	14.28571		15.56886	15.32258
		A	32.65306		32.93413	32.66129
		NO	28.57143		28.74251	29.83871
		D	12.2449		11.97605	11.69355
		SD	12.2449		10.77844	10.48387
	Total	100		100	100	
2	Our company stresses engaging in dialogue with competitors	S.A	10.20408		10.17964	10.08065
		A	34.69388		34.73054	34.67742
		NO	36.73469		36.52695	36.29032
		D	14.28571		13.17365	13.70968
		SD	4.081633		5.389222	5.541935
	Total	100		100	100	
3	Our Company gathers information inside to develop strategies	S.A	10.20408		9.580838	9.274194
		A	34.69388		34.73054	34.27419
		NO	36.73469		37.12575	37.5
		D	16.32653		15.56886	15.72581
		SD	2.040816		2.994012	3.225806
	Total	100		100	100	
4	Our Company encourages observing the work of experts and skilled people	S.A	12.2449		12.57485	12.09677
		A	38.77551		40.11976	39.91935
		NO	30.61224		28.74251	29.43548
		D	14.28571		13.17365	13.30645
		SD	4.081633		5.389222	5.241935
	Total	100		100	100	

The above table shows the age wise analysis, the assessment of the study shows that the age upto 25 years, 14.28% of respondents Strongly Agreed that “Our Company stresses sharing



experience with suppliers and customers ”, 32.65% Agreed,28.57% No Opinion, 12.24% Disagreed,12.24% Strongly Disagreed; The age group between 26-40 years, 15.56% of respondents Strongly Agreed for this statement,32.93% Agreed, 28.74% No opinion, 11.97% Disagreed, 10.77% Strongly Disagreed; The age group between 41-55 years , 15.32% of respondents Strongly Agreed for this statement, 32.66% Agreed, 29.83% No Opinion, 11.69% Disagree, 10.48% Strongly Disagreed.

**Table 4.32 Perception of the Managers on KCP wrt Externalisation**

Sr. No	Items	Rating	25 Years		26-40 Years	41-55 Years
			10.60 %		36.10 %	53.30 %
1	Our Company encourages documenting one’s expertise for others to use.	S.A	4.081633		3.592814	3.629032
		A		30.61224	29.94012	29.83871
		NO	48.97959		50.8982	50.80645
		D	12.2449		11.97605	12.09677
		SD	4.081633		3.592814	3.629032
		Total		100		100
2	Our Company facilitates exchange of ideas through Social media	S.A	2.040816		1.796407	2.016129
		A	38.77551		39.52096	39.51613
		NOD	40.81633		41.91617	41.53226
		SD	14.28571		13.17365	13.30645
			4.081633		3.592814	3.629032
		Total		100		100
3	Our Company circulates suggestions and improvements through channels like brochures, circulars etc.	S.A	4.081633		3.592814	3.629032
		A	30.61224		28.74251	28.62903
		NO	48.97959		50.2994	50.80645
		D	14.28571		14.37126	14.1129
		SD	2.040816		2.994012	2.822581
		Total		100		100
4	Our Company applies the best knowledge to deliver our organizational products and services.	S.A	4.081633		4.790419	4.435484
		A	32.65306		33.53293	33.46774
		NO	46.28578		47.30539	47.17742
		D	14.28571		11.97605	12.5
		SD	2.040816		2.39521	2.419355
		Total		100		100

The Table 4.32 shows the age wise analysis, the assessment of the study shows that the age upto 25 years, 4.08% of respondents Strongly Agreed that “Our Company encourages documenting one’s expertise for others to use ”, 30.61% Agreed, 48.97% No Opinion, 12.24% Disagreed,4.08% Strongly Disagreed; The age group between 26- 40 years, 3.59% of respondents Strongly Agreed for this statement,29.94% Agreed, 50.89% No opinion, 11.97% Disagreed, 3.59% Strongly Disagreed; The age group between 41-55 years , 3.62% of respondents Strongly Agreed for this statement, 29.83% Agreed, 50.80% No Opinion, 12.09% Disagree, 3.62% Strongly Disagreed.

**Table 4.33 Perception of the Managers on KCP wrt Combination**

Sr. No	Items	Rating	25 Years	26-40 Years	41-55 Years
			10.60 %	36.10 %	53.30 %
1	Our company develops plans based on published information, forecasting etc.	S.A	12.2449	11.37725	11.69355
		A	34.69388	36.52695	36.69355
		NO	40.81633	40.71856	40.32258
		D	10.20408	8.982036	8.870968
		SD	2.040816	2.39521	2.419355
		Total	100	100	100
2	Our company stresses creating manuals and documents on products and services.	S.A	12.2449	11.97605	11.69355
		A	34.69388	35.32934	35.48387
		NO	44.89796	42.51497	42.74194
		D	6.122449	7.185629	7.258065
		SD	2.040861	2.994012	2.822581
		Total	100	100	100
3	Our company is keen on creating a data-base on products and service	S.A	8.163265	8.383234	8.467742
		A	38.77551	38.32335	37.90323
		NO	40.81633	41.91617	42.33871
		D	10.20408	8.982036	9.274194
		SD	2.040816	2.39521	2.016129
		Total	100	100	100
4	Our Company develops reports by gathering both technical and financial information	S.A	12.2449	10.77844	10.8871
		A	38.77551	38.32335	38.30645
		NO	38.77551	41.31737	41.12903
		D	8.163265	6.586826	6.854839
		SD	2.040816	2.990412	2.822581
		Total	100	100	100

The Table 4.33 shows the age wise analysis, the assessment of the study shows that the age upto 25 years, 12.24% of respondents Strongly Agreed that “Our Company develops plans

based on published information, forecasting etc ”, 34.69% Agreed, 40.81% No Opinion, 10.20% Disagreed,2.04% Strongly Disagreed; The age group between 26-40 years, 11.37% of respondents Strongly Agreed for this statement,36.52% Agreed, 40.71% No opinion, 8.98% Disagreed, 2.39% Strongly Disagreed; The age group between 41-55 years , 11.69% of respondents Strongly Agreed for this statement, 36.69% Agreed, 40.32% No Opinion, 8.87% Disagree, 2.41% Strongly Disagreed.

**Table 4.34 Perception of the Managers on KCP wrt Internalisation**

Sr. No	Items	Rating	25 Years		26-40	41-55
			10.60	%	Years	Years
				36.10 %	53.30 %	
1	In our company cross functional teams works together for development	S.A	2.040816		2.994012	2.822581
		A	32.65306		32.93413	32.66129
		NO	53.06122		53.89222	54.43548
		D	8.163265		8.383234	8.467742
		SD	4.081633		1.796407	1.612903
		Total		100		100
2	In Our company teams experiments with improvements and the result are shared with the departments	S.A	2.040816		2.994012	3.225806
		A	36.73469		32.93413	32.66129
		NO	51.02041		56.88623	57.25806
		D	6.122449		5.389222	5.241935
		SD	4.081633		1.796407	1.612903
		Total		100		100
3	In our company employees search and share new values and thoughts	S.A	2.040816		2.994012	2.822581
		A	36.73468		38.92216	38.70968
		NO	48.97595		50.2994	50.40323
		D	8.163265		6.586826	6.854839
		SD	4.081633		1.197605	1.209677
		Total		100		100
4	Our company helps employees to understand and share management vision through group communication	S.A	4.081633		4.191617	4.435484
		A	28.57143		29.94012	29.83871
		NO	61.22449		59.28144	58.87097
		D	4.081633		4.191617	4.8387
		SD	2.040816		2.39521	2.016129
		Total		100		100

Table 4.34 shows the age wise analysis, the assessment of the study shows that the age upto 25 years, 2.04% of respondents Strongly Agreed that “In our company cross functional teams works together for development”, 32.65% Agreed, 53.06% No Opinion, 8.16% Disagreed,4.08% Strongly Disagreed; The age group between 26-40 years, 2.99% of respondents Strongly Agreed for this statement,32.93% Agreed,53.89% No opinion, 8.38% Disagreed, 1.79% Strongly Disagreed; The age group between 41-55 years , 2.82% of respondents Strongly Agreed for this statement, 32.66% Agreed, 54.43% No Opinion, 8.46% Disagree, 1.61% Strongly Disagreed.

**Table 4.35 Perception of the Managers wrt Organisational Creativity**

Sr. No	Items	Rating	25 Years		26-40 Years		41-55 Years	
			10.60	%	36.10	%	53.30	%
1	Our company has produced many novel and useful ideas (service/products).	S.A	4.081633		4.191617		4.453484	
		A	28.57143		29.94012		29.43548	
		NO	53.06122		55.68862		55.64516	
		D	10.20408		9.580838		10.08065	
		SD	4.081633		0.598802		0.403226	
		Total		100		100		100
2	Our company fosters an environment that is conducive to our own ability to produce novel and useful ideas.	S.A	2.040816		2.994012		2.822581	
		A	32.65306		34.73054		34.67742	
		NO	48.97959		51.49701		51.20968	
		D	12.2449		9.580838		10.8871	
		SD	4.081633		1.197605		0.403226	
		Total		100		100		100
3	Our company spends much time for producing novel and useful ideas.	S.A	4.081633		2.994012		2.822581	
		A	36.73469		37.12575		36.69355	
		NO	44.89796		49.7006		49.59677	
		D	12.2449		8.982036		10.08065	
		SD	2.040816		1.197605		0.806452	
		Total		100		100		100
4	Our company considers producing novel and useful ideas as important activities	S.A	2.040816		2.994012		3.225806	
		A	30.61224		33.53293		33.46774	
		NO	51.02041		52.09581		52.41935	
		D	12.2449		10.77844		10.48387	
		SD	4.081633		0.598802		0.403226	
		Total		100		100		100

The Table 4.35 shows the age wise analysis, the assessment of the study shows that the age upto 25 years, 4.08% of respondents Strongly Agreed that “ Our company has produced many novel and useful ideas (service/products)”,28.57% Agreed, 53.06% No Opinion, 10.20% Disagreed,4.08% Strongly Disagreed;

The age group between 26-40 years, 4.19% of respondents Strongly Agreed for this statement,29.94% Agreed,55.68% No opinion, 9.58% Disagreed, 0.59% Strongly Disagreed; The age group between 41-55 years , 4.45% of respondents Strongly Agreed for this statement, 29.43% Agreed, 55.64% No Opinion, 10.08% Disagree, 0.40% Strongly Disagreed.

**Table 4.36 Perception of the Managers wrt Organisational Performance:**

Sr. No	Items	Rating	25 Years	26-40 Years	41-55 Years
			10.60 %	36.10 %	53.30 %
1	Compared with key competitors, our company has a greater market share	S.A	8.163265	4.191167	4.032258
		A	28.57143	28.74251	28.62903
		NO	48.97959	53.89222	53.62903
		D	12.2449	11.37725	12.09677
		SD	2.040816	1.796407	1.612903
		Total	100	100	100
2	Compared with key competitors, our company is growing faster	S.A	2.040816	1.796407	2.016129
		A	34.69388	34.73054	34.67742
		NO	46.93878	51.49701	51.20968
		D	14.28571	11.37725	11.69355
		SD	2.040816	0.598802	0.403226
		Total	100	100	100
3	Compared with key competitors, our company is more profitable	S.A	2.040816	2.994012	2.822581
		A	32.65306	31.13772	31.04839
		NO	48.97959	53.89222	53.62903
		D	12.2449	10.77844	11.29032
		SD	4.081633	1.197605	1.209677
		Total	100	100	100
4	Compared with key competitors, our company is more innovative	S.A	2.040816	1.796407	2.016129
		A	34.69388	35.92814	35.48387
		NO	48.97959	51.49701	51.6129
		D	10.20408	9.580838	9.677419
		SD	4.081633	1.197605	1.209677
		Total	100	100	100

The Table 4.36 shows the age wise analysis, the assessment of the study shows that the age upto 25 years, 8.16% of respondents Strongly Agreed that “Compared with key competitors , our company has a greater market share”, 28.57% Agreed, 48.97% No Opinion, 12.24% Disagreed,2.04% Strongly Disagreed; The age group between 26-40 years, 4.19% of respondents Strongly Agreed for this statement,28.74% Agreed,53.89% No opinion, 11.37% Disagreed, 1.79% Strongly Disagreed; The age group between 41-55 years , 4.03% of respondents Strongly Agreed for this statement, 28.62% Agreed, 53.62% No Opinion, 12.09% Disagree, 1.61% Strongly Disagreed.

**Table 4.37 Perception of the Managers on Organizational Culture wrt Collaboration**

Sr. No	Items	Rating	Male	Female
			62.1 %	37.9%
1	Our organization members are supportive	S.A	19.09722	19.31818
		A	30.20833	30.11364
		NO	34.72222	34.09091
		D	9.375	9.659091
		SD	6.597222	6.81812
		Total	100	100
2	Our organization members are helpful	S.A	15.27778	15.34091
		A	40.27778	40.34091
		NO	30.20838	30.11364
		D	9.375	9.959091
		SD	4.861111	4.545455
		Total	100	100
3	There is a willingness to collaborate across organizational units within our organization	S.A	10.06944	10.22727
		A	44.09722	4.75
		NO	30.90278	30.68182
		D	10.41667	10.795454
		SD	4.513889	4.545455
		Total	100	100
4	There is a willingness to accept responsibility for failure	S.A	11.45383	11.36364
		A	46.18056	46.59091
		NO	26.04167	25.56818
		D	11.11111	11.36364
		SD	5.208333	5.113636
		Total	100	100

The above table depicts the Gender wise analysis, 19.09% of Male Strongly Agreed with the statement “Our organization members are supportive”, 30.20% Agreed, 34.72% No Opinion, 9.37% Disagreed, 6.59% Strongly Disagreed; 19.31% of Female Strongly Agreed from the statement “ Our organization members are supportive”, 30.11% Agreed, 34.09% No Opinion, 9.65% Disagreed and 6.81% Strongly Disagreed.

**Table 4.38 Perception of the Managers on Organizational Culture wrt Trust:**

Sr. No	Items	Rating	Male	Female
			62.1 %	37.9%
1	Our company members have reciprocal faith in other members intentions and behaviors	S.A	7.291667	7.386364
		A	35.76389	36.36364
		NO	41.31944	40.90909
		D	10.06944	10.22727
		SD	5.555556	5.113636
		Total	100	100
2	Our company members have reciprocal faith in others ability	S.A	6.597222	6.25
		A	34.02778	34.09091
		NO	43.05556	42.61364
		D	12.15278	12.5
		SD	4.166667	4.545455
		Total	100	100

Sr. No	Items	Rating	Male	Female
			62.1 %	37.9%
3	Our company members have reciprocal faith in others behaviors to work toward organizational goals.	S.A	6.597222	6.818182
		A	28.125	28.40909
		NO	48.61111	48.29545
		D	13.54167	13.63636
		SD	3.125	2.840909
		Total	100	100
4	Our company members have reciprocal faith in others decision toward organizational interests than individual interests.	S.A	6.25	6.25
		A	43.75	43.75
		NO	36.80556	36.93182
		D	9.375	9.090909
		SD	3.819444	3.977273
		Total	100	100

The above table depicts the Gender wise analysis, 7.29% of Male Strongly Agreed with the statement “ Our organization members have reciprocal faith in other members intentions and behaviours”, 35.76% Agreed, 41.31% No Opinion, 10.06% Disagreed,5.55% Strongly Disagreed; 7.38% of Female Strongly Agreed from the statement “Our organization members have reciprocal faith in other members intentions and behaviours”,36.36% Agreed, 40.90% No Opinion,10.22% Disagreed and 5.11% Strongly Disagreed.

**Table 4.39 Perception of the Managers on People wrt T- Shaped Skills:**

Sr. No	Items	Rating	Male	Female
			62.1 %	37.9%
1	Our company members can understand not only their own tasks but also others tasks	S.A	9.027778	9.090909
		A	45.13889	44.88636
		NO	27.77778	27.84091
		D	12.15278	11.93182
		SD	5.902778	6.25
		Total	100	100
2	Our company memberscan make suggestion about others task	S.A	14.93056	14.77273
		A	33.68056	34.09091
		NO	32.98611	32.95455
		D	11.80556	11.36364
		SD	6.597222	6.818182
		Total	100	100
3	Our company members can communicate well not only with their department members but also with other department members	S.A	6.944444	6.818182
		A	48.95833	48.86364
		NO	28.47222	29.54545
		D	10.06944	9.659091
		SD	5.555556	5.113636
		Total	100	100

Sr. No	Items	Rating	Male	Female
			62.1 %	37.9%
4	Our company members are specialists in their own part	S.A	8.680556	8.522727
		A	43.75	43.75
		NO	29.51389	29.54545
		D	11.45833	11.36364
		SD	6.597222	6.818182
		Total	100	100

The above table depicts the Gender wise analysis, 9.02% of Male Strongly Agreed with the statement “Our company members can understand not only their own tasks but also other tasks”, 45.13% Agreed, 27.77% No Opinion, 12.15% Disagreed, 5.90% Strongly Disagreed; 9.09% of Female Strongly Agreed from the statement “Our company members can understand not only their own tasks but also other tasks”, 44.88% Agreed, 27.84% No Opinion, 11.93% Disagreed and 6.25% Strongly Disagreed.

**Table 4.40 Perception of the Managers on People wrt Transformational Leadership:**

Sr. No	Items	Rating	Male	Female
			62.1 %	37.9%
1	Our leadership engages in activities involving considerable personal risk in pursuing organizational objectives.	S.A	9.375	9.659091
		A	25.69444	25.56818
		NO	45.83333	45.45455
		D	14.93056	14.77273
		SD	4.166667	4.545455
		Total	100	100
2	Our leadership makes me aware of strongly held values, ideals and aspirations which are shared in common.	S.A	4.166667	9.977273
		A	32.29167	32.38636
		NO	47.22222	47.15909
		D	14.23611	14.20455
		SD	2.083333	2.272727
		Total	100	100
3	Our leadership encourages creativity and new idea generation	S.A	5.555556	5.113636
		A	35.76389	35.79545
		NO	42.70833	42.61364
		D	12.84722	13.06818
		SD	3.125	3.409091
		Total	100	100



Sr. No	Items	Rating	Male	Female
			62.1 %	37.9%
4	Our leadership encourages two way exchange in communication	S.A	5.902778	5.691818
		A	32.98311	32.95455
		NO	44.09722	44.31818
		D	12.5	12.5
		SD	4.513889	4.545455
		Total	100	100

The above table depicts the Gender wise analysis, 9.37% of Male Strongly Agreed with the statement “Our leadership engages in activities involving considerable personal risk in pursuing organizational objectives”, 25.69% Agreed, 45.83% No Opinion, 14.93% Disagreed, 4.16% Strongly Disagreed; 9.65% of Female Strongly Agreed from the statement “Our leadership engages in activities involving considerable personal risk in pursuing organizational objectives”, 25.56% Agreed, 45.45% No Opinion, 14.77% Disagreed and 4.54% Strongly Disagreed.

**Table 4.41 Perception of the Managers on People wrt IT Support:**

Sr. No	Items	Rating	Male	Female
			62.1 %	37.9%
1	Our company provides IT support for communications among organization members	S.A	5.555556	5.113636
		A	29.16667	29.54545
		NO	40.97222	40.90909
		D	15.97222	15.90909
		SD	8.333333	8.522727
		Total	100	100
2	Our company provides IT support for searching for and accessing necessary information	S.A	2.430556	2.272727
		A	27.43056	27.27273
		NO	47.56944	47.15909
		D	14.93056	15.34091
		SD	7.638889	7.954545
		Total	100	100
3	Our company provides IT support for simulation and prediction	S.A	3.819444	3.409091
		A	32.29167	31.81818
		NO	41.31944	42.04545
		D	17.70833	17.61364
		SD	4.861111	5.113636
		Total	100	100
4	Our company provides IT support for systematic storing	S.A	2.083333	2.272727
		A	29.16667	29.54545
		NO	45.83333	46.02273
		D	14.58333	14.20455
		SD	8.333333	7.954545
		Total	100	100

The above table depicts the Gender wise analysis, 5.55% of Male Strongly Agreed with the statement “Our company provides IT support for communications among organization members”, 29.16% Agreed, 40.97% No Opinion, 15.97% Disagreed, 8.33% Strongly Disagreed; 5.11% of Female Strongly Agreed from the statement “ Our company provides IT support for communications among organization members ”,29.54% Agreed, 40.90% No Opinion,15.90% Disagreed and 8.52% Strongly Disagreed.

**Table 4.42 Perception of the Managers on HRM wrt Selection of Employees**

Sr. No	Items	Rating	Male	Female
			62.1 %	37.9%
1	Our Organization encourages multilingual ability for selection of employees.	S.A	6.944444	6.818182
		A	40.625	40.34091
		NO	63.11111	36.93182
		D	11.45833	11.36364
		SD	4.861111	4.545455
		Total	100	100
2	Our Organization selects the members who works in a team or group efficiently	S.A	4.166667	4.545455
		A	43.05556	42.61364
		NO	39.58333	39.77273
		D	8.680556	8.522727
		SD	4.513889	4.545455
		Total	100	100
3	In our Organization, people who exhibit interest in learning are preferred	S.A	2.083333	2.272727
		A	44.44444	44.31818
		NO	36.45833	36.36364
		D	13.88889	14.20455
		SD	3.125	2.840909
		Total	100	100
4	Our organization considers related professional experience for employees	S.A	4.166667	4.545455
		A	30.55556	30.11364
		NO	49.30556	49.43182
		D	12.84722	12.5
		SD	3.125	3.409091
		Total	100	100

The above table depicts the Gender wise analysis, 6.94% of Male Strongly Agreed with the statement “Our Organization encourages multilingual ability for selection of employees”, 40.62% Agreed, 63.11% No Opinion, 11.45% Disagreed, 4.86% Strongly Disagreed; 6.81% of Female Strongly Agreed from the statement “Our Organization encourages multilingual ability for selection of employees”, 40.34% Agreed, 36.93% No Opinion, 11.36% Disagreed and 4.54% Strongly Disagreed.

**Table 4.43 Perception of the Managers on HRM wrt Training & Development**

Sr. No	Items	Rating	Male	Female
			62.1 %	37.9%
1	Our Organization rewards and recognizes trained staff	S.A	5.555556	5.681818
		A	35.06944	35.22727
		NO	42.01389	42.04545
		D	10.76389	10.79545
		SD	6.597222	6.25
		Total	100	100
2	Our Organization encourages employees to participate in internal and external new learning opportunities such as conferences, seminars, university courses, training etc	S.A	2.777778	2.840909
		A	35.06944	35.79545
		NO	44.09722	43.75
		D	12.5	12.5
		SD	5.555556	5.113636
		Total	100	100
3	Our Organization provides training in skills development such as documentation, creative thinking, problem solving, communication, teambuilding etc	S.A	2.430556	2.272727
		A	44.09722	43.75
		NO	34.02778	34.09091
		D	15.625	15.90909
		SD	3.819444	3.977273
		Total	100	100
4	Our company provides training by presenting various contexts and many examples in which trainee can expect to use the skills and knowledge in real time environment	S.A	5.555556	5.113636
		A	39.58333	39.77273
		NO	38.88889	39.20455
		D	10.41667	10.79545
		SD	5.555556	5.113636
		Total	100	100

The above table depicts the Gender wise analysis, 5.55% of Male Strongly Agreed with the statement “Our Organization rewards and recognizes trained staff”, 35.06% Agreed, 42.01% No Opinion, 10.76% Disagreed, 6.59% Strongly Disagreed; 5.68% of Female Strongly Agreed from the statement “Our Organization rewards and recognizes trained staff”, 35.22% Agreed, 42.04% No Opinion, 10.79% Disagreed and 6.25% Strongly Disagreed.

**Table 4.44 Perception of the Managers on HRM wrt Performance Appraisal**

Sr. No	Items	Rating	Male	Female
			62.1 %	37.9%
1	Our company provides feedback which is useful for improvement	S.A	7.638889	7.386364
		A	45.13889	45.45455
		NO	32.63889	32.38636
		D	11.11111	11.36364
		SD	3.472222	3.409091
		Total	100	100

Sr. No	Items	Rating	Male	Female
			62.1 %	37.9%
2	Our company provides feedback which is used for ratings, reward and sanctions	S.A	2.777778	2.840909
		A	49.30556	48.86364
		NO	31.94444	31.81818
		D	12.15278	12.5
		SD	3.819444	3.977273
		Total	100	100
3	Our company collects feedback based on personal characteristics not relevant to work	S.A	5.208333	5.113636
		A	40.97222	40.90909
		NO	38.19444	39.20455
		D	11.80556	11.36364
		SD	3.819444	3.409091
		Total	100	100
4	Our company collects feedback based on the key process indicators	S.A	6.25	6.25
		A	32.98611	32.95455
		NO	43.05556	43.75
		D	13.54167	13.06818
		SD	4.166667	3.977273
		Total	100	100

The above table depicts the Gender wise analysis, 7.63% of Male Strongly Agreed with the statement “Our company provides feedback which is useful for improvement”, 45.13% Agreed, 32.63% No Opinion, 11.11% Disagreed, 3.47% Strongly Disagreed; 7.38% of Female Strongly Agreed from the statement “Our company provides feedback which is useful for improvement”, 45.45% Agreed, 32.38% No Opinion, 11.36% Disagreed and 3.40% Strongly Disagreed.

**Table 4.45 Perception of the Managers on HRM wrt Compensation & Reward system**

Sr. No	Items	Rating	Male	Female
			62.1 %	37.9%
1	Our organization rewards for measurable competencies	S.A	11.80556	11.36364
		A	26.04167	26.13636
		NO	43.40278	43.75
		D	13.88889	14.20455
		SD	4.861111	4.545455
		Total	100	100
2	In Our Organization employees are rewarded for new ideas	S.A	7.986111	7.954545
		A	35.41667	35.22727
		NO	40.27778	40.90909
		D	13.19444	13.06818
		SD	3.125	2.840909
		Total	100	100
3	Our organization keeps group incentives clear and simple	S.A	8.333333	7.954545
		A	34.02778	34.09091
		NO	41.31944	41.47727
		D	14.58333	14.77273
		SD	1.736111	1.704545
		Total	100	100

Sr. No	Items	Rating	Male	Female
			62.1 %	37.9%
4	Our Organization rewards those who brings improvement in work or output	S.A	10.41667	10.79545
		A	29.16667	28.97727
		NO	45.83333	44.88636
		D	10.41667	10.79545
		SD	4.166667	4.545455
		Total	100	100

The above table depicts the Gender wise analysis, 11.80% of Male Strongly Agreed with the statement “Our organization rewards for measurable competencies”, 26.04% Agreed, 43.40% No Opinion, 13.88% Disagreed, 4.86% Strongly Disagreed; 11.36% of Female Strongly Agreed from the statement “Our organization rewards for measurable competencies”, 26.13% Agreed, 43.75% No Opinion, 14.20% Disagreed and 4.54% Strongly Disagreed.

**Table 4.46 Perception of the Managers on Knowledge creation Process: Socialization**

Sr. No	Items	Rating	Male	Female
			62.1 %	37.9%
1	Our company stresses sharing experience with suppliers and customers	S.A	15.27778	15.34091
		A	32.63889	32.38636
		NO	29.86111	29.54545
		D	11.80556	11.93182
		SD	10.41667	10.79545
		Total	100	100
2	Our company stresses engaging in dialogue with competitors	S.A	10.06944	9.659091
		A	35.06944	34.65909
		NO	35.76389	36.93182
		D	13.88889	13.63636
		SD	5.208333	5.113636
		Total	100	100
3	Our Company gathers information inside to develop strategies	S.A	9.375	9.090909
		A	34.375	34.65909
		NO	37.15278	36.93182
		D	15.97222	15.90909
		SD	3.125	3.409091
		Total	100	100
4	Our Company encourages observing the work of experts and skilled people	S.A	12.15278	12.5
		A	39.93056	39.77273
		NO	29.16667	29.54545
		D	13.54167	13.06818
		SD	5.208333	5.113636
		Total	100	100

The above table depicts the Gender wise analysis, 15.27% of Male Strongly Agreed with the statement “Our company stresses sharing experience with suppliers and customers”, 32.63% Agreed, 29.86% No Opinion, 11.80% Disagreed, 10.41% Strongly Disagreed; 15.34% of Female Strongly Agreed from the statement “Our company stresses sharing experience with suppliers and customers”, 32.83% Agreed, 29.54% No Opinion, 11.93% Disagreed and 10.79% Strongly Disagreed.

**Table 4.47 Perception of the Managers on Knowledge creation Process: Externalization**

Sr. No	Items	Rating	Male	Female
			62.1 %	37.9%
1	Our Company encourages documenting one's expertise for others To use.	S.A	3.819444	3.409091
		A	29.86111	28.97727
		NO	50.69444	51.13636
		D	11.80556	12.5
		SD	3.819444	3.977273
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our Company facilitates exchange of ideas through Social media	S.A	2.083333	1.704545
		A	39.58333	39.77273
		NO	41.66667	42.04545
		D	13.19444	13.06818
		SD	3.472222	3.409091
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our Company circulates suggestions and improvements through channels like brochures, circulars etc.	S.A	3.819444	3.409091
		A	28.81944	28.97727
		NO	50.34722	50
		D	13.88889	14.20455
		SD	3.125	3.409091
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our Company applies the best knowledge to deliver our organizational products and services.	S.A	4.513889	4.545455
		A	33.33333	33.52273
		NO	46.875	47.15909
		D	12.84722	12.5
		SD	2.430556	2.272727
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table depicts the Gender wise analysis, 3.81% of Male Strongly Agreed with the statement “Our company encourages documenting one’s expertise for others to use”, 29.86% Agreed, 50.69% No Opinion, 11.80% Disagreed, 3.81% Strongly Disagreed; 3.40% of Female Strongly Agreed from the statement “Our company encourages documenting one’s expertise for others to use”, 28.97% Agreed, 51.13% No Opinion, 12.5% Disagreed and 3.97% Strongly Disagreed.

**Table 4.48 Perception of the Managers on Knowledge creation Process: Combination**

Sr. No	Items	Rating	Male	Female
			62.1 %	37.9%
1	Our company develops plans based on published information, forecasting etc.	S.A	11.80556	11.36364
		A	36.45833	36.93182
		NO	40.27778	40.34091
		D	9.027778	9.090909
		SD	2.430556	2.272727
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our company stresses creating manuals and documents on products and services.	S.A	11.80556	11.93182
		A	35.06944	35.22727
		NO	43.05556	42.61364
		D	7.291667	7.386364
		SD	2.777778	2.840909
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our company is keen on creating a data-base on products and service	S.A	8.680556	8.522727
		A	38.19444	38.06818
		NO	41.66667	41.47727
		D	9.375	9.659091
		SD	2.083333	2.272727
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our Company develops reports by gathering both technical and financial information	S.A	11.11111	10.795454
		A	38.19444	38.63636
		NO	40.65	40.90909
		D	6.944444	6.818182
		SD	3.125	2.840909
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table depicts the Gender wise analysis, 11.80% of Male Strongly Agreed with the statement “Our company develops plans based on published information, forecasting etc.”, 36.45% Agreed, 40.27% No Opinion, 9.02% Disagreed, 2.43% Strongly Disagreed; 11.36% of Female Strongly Agreed from the statement “Our company develops plans based on published information, forecasting etc.”, 36.93% Agreed, 40.34% No Opinion, 9.09% Disagreed and 2.27% Strongly Disagreed.

**Table 4.49 Perception of the Managers on Knowledge creation Process: Internalization**

Sr. No	Items	Rating	Male	Female
			62.1 %	37.9%
1	In our company cross functional teams works together for development	S.A	3.125	2.840909
		A	32.63889	32.38636
		NO	54.51389	54.54545
		D	8.333333	8.522727
		SD	1.388889	1.704545
		<b>Total</b>	<b>100</b>	<b>100</b>
2	In Our company teams experiments with improvements and the result are shared with the departments	S.A	3.125	3.409091
		A	32.63889	32.38636
		NO	57.29167	57.38636
		D	5.208333	5.113636
		SD	1.736111	1.704545
		<b>Total</b>	<b>100</b>	<b>100</b>
3	In our company employees search and share new values and thoughts.	S.A	3.125	2.840909
		A	38.88889	38.63636
		NO	50	50.56818
		D	6.597222	6.818182
		SD	1.388889	1.136364
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our company helps employees to understand and share management vision through group communication.	S.A	4.166667	4.545455
		A	29.86111	29.54545
		NO	59.02778	59.09091
		D	4.861111	4.545455
		SD	2.083333	2.272727
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table depicts the Gender wise analysis, 3.12% of Male Strongly Agreed with the statement “In our company cross functional teams works together for development”, 32.63% Agreed, 54.51% No Opinion, 8.33% Disagreed, 1.38% Strongly Disagreed; 2.84% of Female Strongly Agreed from the statement “In our company cross functional teams works together for development”, 32.38% Agreed, 54.54% No Opinion, 8.52% Disagreed and 1.70% Strongly Disagreed.



**Table 4.50 Perception of the Managers on Organisational Creativity**

Sr. No	Items	Rating	Male	Female
			62.1 %	37.9%
1	Our company has produced many novel and useful ideas (service/products).	S.A	4.166667	4.545455
		A	29.86111	29.54545
		NO	55.55556	55.68182
		D	10.06944	9.659091
		SD	0.347222	0.568182
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our company fosters an environment that is conducive to our own ability to produce novel and useful ideas.	S.A	3.125	2.840909
		A	35.06944	34.65909
		NO	50.69444	51.70455
		D	10.76389	10.22727
		SD	0.347222	0.568182
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our company spends much time for producing novel and useful ideas.	S.A	3.125	2.840909
		A	36.80556	36.93182
		NO	49.65278	49.43182
		D	9.722222	10.22727
		SD	0.694444	0.568182
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our company considers producing novel and useful ideas as important activities	S.A	3.125	3.409091
		A	33.33333	33.52273
		NO	52.43056	51.70455
		D	10.76389	10.79545
		SD	0.347222	0.568182
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table 4.51 depicts the Gender wise analysis, 4.16% of Male Strongly Agreed with the statement “Our company has produced many novel and useful ideas (service/products)”, 29.86% Agreed, 55.55% No Opinion, 10.06% Disagreed, 0.34% Strongly Disagreed; 4.54% of Female Strongly Agreed from the statement “Our company has produced many novel and useful ideas (services/products)”,29.54% Agreed,55.68% No Opinion,9.65% Disagreed and 0.56% Strongly Disagreed.

**Table 4.51 Perception of the Managers on Organizational Performance**

Sr. No	Items	Rating	Male	Female
			62.1 %	37.9%
1	Compared with key competitors, our company has a greater market share.	S.A	4.166667	3.977273
		A	28.81944	28.97727
		NO	53.47222	53.40909
		D	12.15278	11.93182
		SD	1.388889	1.704545
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Compared with key competitors, our company is growing faster.	S.A	2.083333	1.704545
		A	34.375	34.65909
		NO	51.38889	51.13636
		D	11.80556	11.93182
		SD	0.347222	0.568182
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Compared with key competitors, our company is more profitable.	S.A	3.125	2.840909
		A	31.25	31.25
		NO	53.125	53.40909
		D	11.45833	11.36364
		SD	1.041667	1.136364
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Compared with key competitors, our company is more innovative.	S.A	2.083333	1.704545
		A	35.41667	35.79545
		NO	52.08333	51.70455
		D	9.375	9.659091
		SD	1.041667	1.136364
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table depicts the Gender wise analysis, 4.16% of Male Strongly Agreed with the statement “Compared with key competitors, our company has a greater market share”, 28.81% Agreed, 53.47% No Opinion, 12.15% Disagreed, 1.38% Strongly Disagreed; 3.97% of Female Strongly Agreed from the statement “Compared with key competitors, our company has a greater market share”, 28.97 % Agreed, 53.40% No Opinion, 11.93% Disagreed and 1.70% Strongly Disagreed.

**Table 4.52 Perception of the Managers on Organizational Culture wrt Collaboration**

Sr. No	Items	Rating	<5Years	5-10 Years	>10Years
			39.40%	33.20%	27.40%
1	Our organization members are supportive	S.A	19.12568	19.48052	19.68504
		A	30.60109	29.87013	31.49606
		NO	34.42623	34.41558	33.85827
		D	9.289617	9.74026	8.661417
		SD	6.557377	6.493506	6.299213
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our organization members are helpful	S.A	15.30055	15.58442	16.53543
		A	40.98361	40.25974	40.94488
		NO	29.5082	29.87013	29.92126
		D	9.289617	9.74026	8.661417
		SD	4.918033	4.545455	3.937008
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	There is a willingness to collaborate across organizational units within our organization	S.A	10.38251	10.38961	11.02362
		A	43.71585	44.15584	44.09449
		NO	31.69399	30.51948	29.92126
		D	9.836066	10.38961	10.23622
		SD	4.371585	4.545455	4.724409
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	There is a willingness to accept responsibility for failure	S.A	11.47541	11.68331	11.81102
		A	46.44809	46.1039	46.45669
		NO	26.77596	25.97403	25.19685
		D	10.38251	11.03896	11.02362
		SD	4.918033	5.194805	5.511811
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 4.52 shows the Manager’s Experience wise analysis. The assessment of the study shows that 19.12% of respondents < 5 years’ experience, Strongly Agree that “Our organization members are supportive”, 30.60% Agreed, 34.42% No opinion, 9.28% Disagreed, 6.55%Strongly Disagreed; 19.48% of respondents between 5-10 years strongly Agreed from the statement that “Our organization members are supportive”, 29.87% Agreed, 34.41% No Opinion, 9.74% Disagreed, 6.49% Strongly Disagreed; 19.68% of respondents >10 years Strongly Agreed form the statement that “Our organization members are supportive”, 31.49% Agreed, 33.85% No Opinion, 8.66% Disagree, 6.29% strongly Disagreed.

**Table 4.53 Perception of the Managers on Organisational Culture wrt Trust**

Sr. No	Items	Rating	<5Years	5-10 Years	>10 Years
			39.40 %	33.20 %	27.40 %
1	Our company members have reciprocal faith in other members intentions and behaviors	S.A	7.103825	7.142857	7.086614
		A	36.06557	35.71429	37.00787
		NO	40.98361	40.90909	41.73228
		D	10.38251	10.38961	9.448819
		SD	5.464481	5.841156	4.724409
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our company members have reciprocal faith in others ability	S.A	6.557377	6.493506	7.086614
		A	33.87978	33.76623	33.07087
		NO	43.1694	42.85714	43.30709
		D	12.02186	12.33766	12.59843
		SD	4.371585	4.545455	3.937008
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Our company members have reciprocal faith in others behaviors to work toward organizational goals.	S.A	6.557377	6.493506	6.299213
		A	27.86885	27.92208	28.34646
		NO	48.63388	48.7013	48.8189
		D	13.6612	13.63636	13.38583
		SD	3.278689	3.246753	3.149606
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our company members have reciprocal faith in others decision toward organizational interests than individual interests.	S.A	6.010292	6.493506	6.299213
		A	43.71585	43.50649	44.09449
		NO	37.15847	37.01299	37.79528
		D	9.289617	9.090909	8.661417
		SD	3.825137	3.896104	3.149606
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 4.53 shows the Manager’s Experience wise analysis. The assessment of the study shows that 7.10% of respondents < 5 years’ experience, Strongly Agree that “ Our company members have reciprocal faith in other members intentions and behaviors ”, 36.06% Agreed, 40.98% No opinion, 10.38% Disagreed, 5.46% Strongly Disagreed; 7.14 % of respondents between 5-10 years Strongly Agreed from the statement that “Our company members have reciprocal faith in other members intentions and behaviors”, 35.71% Agreed, 40.90% No Opinion, 10.38% Disagreed, 5.84% Strongly Disagreed; 7.08% of respondents >10 years Strongly Agreed form the statement that “Our company members have reciprocal faith in other members intentions and behaviors”, 37% Agreed, 41.73% No Opinion, 9.44% Disagree, 4.72% Strongly Disagreed.

**Table 4.54 Perception of the Managers on People wrt T- Shaped Skills**

Sr. No	Items	Rating	<5Years	5-10 Years	>10Years
			39.40 %	32.20%	27.40 %
1	Our company members can understand not only their own tasks but also others tasks	S.A	9.289617	9.090909	8.661817
		A	44.80874	44.80519	45.66929
		NO	27.86885	27.92208	28.34646
		D	12.02186	12.33766	12.59843
		SD	6.010929	5.844156	4.724409
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our company members can make suggestion about others task	S.A	14.7541	14.93506	15.74803
		A	33.87978	33.76623	33.07087
		NO	33.33333	33.11688	33.07087
		D	11.47541	11.68831	11.81102
		SD	6.557377	6.493506	6.299213
		Total	100	100	100
3	Our company members can communicate well not only with their department members but also with other department members	S.A	7.103825	7.142857	7.086614
		A	49.18033	49.35065	49.6063
		NO	28.4153	28.57143	28.34646
		D	9.836066	9.74026	8.661417
		SD	5.464481	5.194805	6.299213
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our company members re specialists in their own part	S.A	8.743169	8.441558	8.661417
		A	43.71585	43.50649	44.09449
		NO	29.5082	29.22078	29.13386
		D	11.47541	11.68831	11.02362
		SD	6.557377	7.142857	7.086614
		Total	100	100	100

Table 4.54 shows the Manager’s Experience wise analysis. The assessment of the study shows that 9.28% of respondents < 5 years’ experience, Strongly Agree that “Our company members can understand not only their own tasks but also others tasks”, 44.8% Agreed, 27.86% No opinion, 12.02% Disagreed, 6.01% Strongly Disagreed; 9.09 % of respondents between 5-10 years Strongly Agreed from the statement that “Our company members can understand not only their own tasks but also others tasks”, 44.8% Agreed, 27.92% No Opinion, 12.33% Disagreed, 5.84% Strongly Disagreed; 8.66% of respondents >10 years Strongly Agreed form the statement that “Our company members can understand not only their own tasks but also others tasks”, 45.66% Agreed, 28.34% No Opinion, 12.59% Disagree, 4.72% Strongly Disagreed.

**Table 4.55 Perception of the Managers on Transformational leadership**

Sr. No	Items	Rating	<5Years	5-10 Years	>10 Years
			39.40 %	32.20 %	27.40 %
1	Our leadership engages in activities involving considerable personal risk in pursuing organizational objectives.	S.A	9.289617	9.74026	10.23622
		A	25.68306	25.97403	25.19685
		NO	45.90164	45.45455	46.45669
		D	14.7541	14.93506	14.17323
		SD	4.371585	3.896104	3.937008
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our leadership makes me aware of strongly held values, ideals and aspirations which are shared in common.	S.A	3.825137	3.896104	3.937008
		A	32.24044	32.46753	32.28346
		NO	46.99454	47.4026	47.24409
		D	14.20765	14.28571	14.17323
		SD	2.73224	1.948052	2.362205
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Our leadership encourages creativity and new idea generation	S.A	5.464481	5.194805	6.299213
		A	35.51913	35.71429	34.64567
		NO	42.62295	42.85714	43.30709
		D	13.11475	12.98701	12.59843
		SD	3.278689	3.246753	3.149606
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our leadership encourages two way exchange in communication	S.A	6.010929	5.844156	6.299213
		A	33.33333	33.11688	32.28346
		NO	43.71585	44.15584	44.09449
		D	12.56831	12.33766	12.59843
		SD	4.3371585	4.545455	4.724409
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 4.55 shows the Manager’s Experience wise analysis. The assessment of the study shows that 9.28% of respondents < 5 years’ experience, Strongly Agree that “Our leadership engages in activities involving considerable personal risk in pursuing organizational objectives”, 25.68% Agreed, 45.90% No opinion, 14.75% Disagreed, 4.37% Strongly Disagreed; 9.74 % of respondents between 5-10 years Strongly Agreed from the statement that “Our leadership engages in activities involving considerable personal risk in pursuing organizational objectives”, 25.97% Agreed, 45.45% No Opinion, 14.93% Disagreed, 3.89% Strongly Disagreed; 10.23% of respondents >10 years Strongly Agreed from the statement that “Our leadership engages in activities involving considerable personal risk in pursuing organizational objectives s”, 25.19% Agreed, 46.45% No Opinion, 14.17% Disagree, 3.93% Strongly Disagreed.

**Table 4.56 Perception of the Managers on IT Support**

Sr. No	Items	Rating	<5Years	5-10 Years	>10 Years
			39.40 %	32.20 %	27.40 %
1	Our company provides IT support for communications among organization members	S.A	5.464481	5.194805	5.511811
		A	29.5082	29.22078	29.13386
		NO	40.98361	40.90909	41.73228
		D	18.84699	16.23377	15.74803
		SD	8.196721	8.441558	7.874016
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our company provides IT support for searching for and accessing necessary information	S.A	2.185792	2.597403	2.362205
		A	27.86885	27.27273	27.55906
		NO	46.99454	47.4026	47.24409
		D	15.30055	14.93506	15.74803
		SD	7.650273	7.792208	7.086614
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Our company provides IT support for simulation and prediction	S.A	3.825137	3.896104	3.937008
		A	32.24044	31.81818	31.49606
		NO	41.53005	41.55844	42.51969
		D	17.48634	17.53247	17.32283
		SD	4.918033	5.194805	4.724409
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our company provides IT support for systematic storing	S.A	2.185792	1.948052	3.149606
		A	29.5082	29.22078	28.34646
		NO	45.90164	46.1039	46.45669
		D	14.20765	14.28571	14.17323
		SD	8.196721	8.441558	7.874016
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 4.56 shows the Manager’s Experience wise analysis. The assessment of the study shows that 5.46% of respondents < 5 years’ experience, Strongly Agree that “Our company provides IT Support for communications among organization members”, 29.5% Agreed, 40.98% No opinion, 18.84% Disagreed, 8.19% Strongly Disagreed; 5.19 % of respondents between 5-10 years Strongly Agreed from the statement that “Our company provides IT Support for communications among organization members”, 29.22% Agreed, 40.90% No Opinion, 16.23% Disagreed, 8.44% Strongly Disagreed; 5.51% of respondents >10 years Strongly Agreed from the statement that “Our company provides IT Support for communications among organization members”, 29.13% Agreed, 41.73% No Opinion, 15.74% Disagree, 7.87% Strongly Disagreed.

**Table 4.57 Perception of the Managers on HRM wrt Selection of employees**

Sr. No	Items	Rating	<5Years	5-10 Years	>10 Years
			39.40 %	32.20%	27.40 %
1	Our Organization encourages multilingual ability for selection of employees.	S.A	7.103825	7.142857	6.299213
		A	39.89017	40.25974	40.94488
		NO	36.61202	36.36364	37.00787
		D	11.47541	11.68831	11.02362
		SD	4.918033	4.545455	4.724409
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our Organization selects the members who works in a team or group efficiently	S.A	4.371585	4.545455	3.937008
		A	43.1694	42.85714	43.30709
		NO	39.34426	39.61039	40.15748
		D	8.743169	8.441558	7.874016
		SD	4.371585	4.545455	4.724409
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	In our Organization, people who exhibit interest in learning are preferred	S.A	2.185792	1.948052	2.362205
		A	43.71585	44.15584	44.88189
		NOD	36.61202	36.36364	36.22047
		SD	14.20765	14.28571	13.38583
			3.278689	3.246753	3.149606
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>		
4	Our organization considers related professional experience for employees	S.A	4.371585	4.545455	3.937008
		A	30.60109	30.51948	30.70866
		NO	49.18033	49.35065	49.6063
		D	12.56831	12.98701	12.59843
		SD	3.278689	2.597403	3.149606
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 4.57 shows the Manager’s Experience wise analysis. The assessment of the study shows that 7.10% of respondents < 5 years’ experience, Strongly Agree that “Our organization encourages multilingual ability for selection of employees”, 39.89% Agreed, 36.61% No opinion, 11.47% Disagreed, 4.91% Strongly Disagreed; 7.14% of respondents between 5-10 years Strongly Agreed from the statement that “Our organization encourages multilingual ability for selection of employees”, 40.25% Agreed, 36.36% No Opinion, 11.68% Disagreed, 4.54% Strongly Disagreed; 6.29% of respondents >10 years Strongly Agreed from the statement that “Our organization encourages multilingual ability for selection of employees”, 40.94% Agreed, 37% No Opinion, 11.02% Disagree, 4.72% Strongly Disagreed.



**Table 4.58 Perception of the Managers on HRM wrt Training and development**

Sr. No	Items	Rating	<5Years	5-10 Years	>10 Years
			39.40%	32.20 %	27.40 %
1	Our Organization rewards and recognizes trained staff	S.A	5.464481	5.844156	5.511811
		A	34.97268	35.06494	34.64567
		NO	42.0765	42.20779	42.51969
		D	10.92896	11.03896	11.02362
		SD	6.557377	5.844156	6.299213
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our Organization encourages employees to participate in internal and external new earning opportunities such as conferences, seminars, university courses, training etc	S.A	2.73224	2.597403	2.362205
		A	34.97268	35.06494	35.43307
		NO	43.1694	44.15584	44.09449
		D	13.11475	12.98701	12.59843
		SD	6.010929	5.194805	5.511811
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Our Organization provides training in skills development such as documentation, creative thinking, problem solving, communication, teambuilding etc.	S.A	2.185792	2.597403	2.362205
		A	43.71585	44.15584	44.09449
		NO	33.87978	33.76623	33.85827
		D	15.84699	15.58442	15.74805
		SD	4.371585	3.896104	3.937008
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our company provides training by presenting various contexts and many examples in which trainee can expect to use the skills and knowledge in real time environment	S.A	5.464481	5.194805	5.511811
		A	39.34426	39.61039	40.15748
		NO	38.79781	38.96104	39.37008
		D	10.38251	11.03896	9.448819
		SD	6.010929	5.194805	5.511811
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 4.58 shows the Manager’s Experience wise analysis. The assessment of the study shows that 5.46% of respondents < 5 years’ experience, Strongly Agree that “Our organization rewards and recognizes trained staff”, 34.97% Agreed, 42.07% No opinion, 10.92% Disagreed, 6.55% Strongly Disagreed; 5.84% of respondents between 5-10 years Strongly Agreed from the statement that “Our organization rewards and recognizes trained staff”, 35.06% Agreed, 42.2% No Opinion, 11.03% Disagreed, 5.84% Strongly Disagreed; 5.51% of respondents >10 years Strongly Agreed from the statement that “Our organization rewards and recognizes trained staff”, 34.64% Agreed, 42.51% No Opinion, 11.02% Disagree, 6.29% Strongly Disagreed.

**Table 4.59 Perception of the Managers on HRM wrt Performance appraisal**

Sr. No	Items	Rating	<5Years	5-10 Years	>10 Years
			39.40 %	32.20%	27.40 %
1	Our company provides feedback which is useful for improvement	S.A	7.650273	7.792208	7.086614
		A	45.35519	45.45455	45.66929
		NO	32.78689	32.46753	33.07087
		D	10.92896	11.03896	11.81102
		SD	3.278689	3.246753	3.149606
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our company provides feedback which is used for ratings, reward and sanctions	S.A	2.73224	2.597403	2.362205
		A	49.18033	49.35065	49.6063
		NO	31.69399	31.81818	31.49606
		D	12.56831	12.33766	13.38583
		SD	3.825137	3.896104	3.149606
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Our company collects feedback based on personal characteristics not relevant to work	S.A	4.918033	5.194805	4.724409
		A	40.98361	40.90909	41.73228
		NO	38.79781	38.31169	39.37008
		D	11.47541	11.68831	11.02362
		SD	3.825137	3.896104	3.149606
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our company collects feedback based on the key process indicators	S.A	6.557377	6.493506	6.299213
		A	33.33333	33.11688	32.28346
		NO	42.62295	42.85714	43.30709
		D	13.6612	13.63636	14.17323
		SD	3.825137	3.896104	3.937008
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 4.59 shows the Manager’s Experience wise analysis. The assessment of the study shows that 7.65% of respondents < 5 years’ experience, Strongly Agree that “Our company provides feedback which is useful for improvement”, 45.35% Agreed, 32.78% No opinion, 10.92% Disagreed, 3.27% Strongly Disagreed; 7.79% of respondents between 5-10 years Strongly Agreed from the statement that “Our company provides feedback which is useful for improvement”, 45.45% Agreed, 32.46% No Opinion, 11.03% Disagreed, 3.24% Strongly Disagreed; 7.08% of respondents >10 years Strongly Agreed from the statement that “Our company provides feedback which is useful for improvement”, 45.66% Agreed, 33.07% No Opinion, 11.81% Disagree, 3.14% Strongly Disagreed.

**Table 4.60 Perception of the Managers on HRM wrt Compensation and reward System**

Sr. No	Items	Rating	<5Years	5-10 Years	>10 Years
			39.40%	32.20%	27.40 %
1	Our organization rewards for measurable competencies	S.A	11.47541	11.68831	11.02362
		A	25.68306	25.97403	26.77165
		NO	43.71585	43.50649	44.09449
		D	14.20765	14.28571	14.17323
		SD	4.918033	4.545455	3.937008
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	In Our Organization employees are rewarded for new ideas	S.A	8.196721	7.792208	7.874016
		A	35.51913	35.06494	34.64567
		NO	39.89071	40.90909	40.94488
		D	13.11475	12.98701	13.38583
		SD	3.278689	3.246753	3.149606
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Our organization keeps group incentives clear and simple	S.A	8.196721	8.441558	7.874016
		A	34.42623	34.41558	34.64657
		NO	40.98361	40.25974	41.73228
		D	14.7541	14.93506	14.17323
		SD	1.639344	1.948052	1.574803
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our Organization rewards those who brings improvement in work or output	S.A	10.38251	10.38961	11.02362
		A	28.96175	29.22078	28.34646
		NO	45.35519	45.45455	45.66929
		D	10.92896	10.38961	11.02362
		SD	4.371585	4.545455	3.937008
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Table 4.60 shows the Manager’s Experience wise analysis. The assessment of the study shows that 11.47% of respondents < 5 years’ experience, Strongly Agree that “Our organization rewards for measurable competencies”, 25.68% Agreed, 43.71% No opinion, 14.20% Disagreed, 4.91% Strongly Disagreed; 11.68% of respondents between 5-10 years Strongly Agreed from the statement that “Our organization rewards for measurable competencies”, 25.97% Agreed, 43.50% No Opinion, 14.28% Disagreed, 4.54% Strongly Disagreed; 11.02% of respondents >10 years Strongly Agreed from the statement that “Our organization rewards for measurable competencies”, 26.77% Agreed, 44.09% No Opinion, 14.17% Disagree, 3.93% Strongly Disagreed

**Table 4.61 Perception of the Managers on Knowledge Creation Process wrt Socialization**

Sr. No	Items	Rating	<5Years	5-10 Years	>10 Years
			39.40%	32.20 %	27.40 %
1	Our company stresses sharing experience with suppliers and customers	S.A	15.30055	15.58442	16.53543
		A	32.24044	32.46753	32.28346
		NO	29.5082	29.87031	29.92126
		D	12.02186	11.68832	11.02362
		SD	10.92896	10.38961	10.23622
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our company stresses engaging in dialogue with competitors	S.A	9.836066	9.74026	9.448819
		A	35.51913	35.06494	34.64567
		NO	36.06557	36.36364	37.00787
		D	13.6612	13.63636	14.17323
		SD	4.918033	5.194805	4.724409
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Our Company gathers information inside to develop strategies	S.A	9.289617	9.090909	8.661417
		A	34.42623	34.41558	33.85827
		NO	37.15847	37.01299	37.79528
		D	15.84699	16.23377	16.53543
		SD	3.278689	3.246753	3.149606
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our Company encourages observing the work of experts and skilled people	S.A	12.02186	12.33766	12.59843
		A	39.89071	39.61039	39.37008
		NO	30.05464	29.22078	29.13386
		D	13.11475	13.63636	14.17323
		SD	4.918033	5.194805	4.724409
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

The above table 4.61 shows the Manager’s Experience wise analysis. The assessment of the study shows that 15.30% of respondents < 5 years’ experience, Strongly Agree that “Our organization rewards for measurable competencies”, 32.24% Agreed, 29.50% No opinion, 12.02% Disagreed, 10.92% Strongly Disagreed; 15.58% of respondents between 5-10 years Strongly Agreed from the statement that “Our organization rewards for measurable competencies”, 32.46% Agreed, 29.87% No Opinion, 11.68% Disagreed, 10.38% Strongly Disagreed; 16.53% of respondents >10 years Strongly Agreed form the statement that “Our organization rewards for measurable competencies”, 32.28% Agreed, 29.92% No Opinion, 11.02% Disagree, 10.23% Strongly Disagreed

**Table 4.62 Perception of the Managers on Knowledge Creation Process: Externalization**

Sr. No	Items	Rating	<5Years	5-10 Years	>10 Years
			39.40 %	32.20 %	27.40%
1	Our Company encourages documenting one's expertise for others to use.	S.A	3.825137	3.896104	3.937008
		A	29.5082	29.87013	29.13386
		NO	50.81967	50	51.1811
		D	12.02186	12.99766	12.59843
		SD	3.825137	3.896104	3.149606
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our Company facilitates exchange of ideas through Socialmedia	S.A	2.185792	1.948052	1.574803
		A NO	39.34426	39.61039	40.15748
		D SD	41.53005	41.55844	41.73228
			13.11475	13.63636	13.38583
			3.825137	3.246753	3.149606
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Our Company circulates suggestions and improvements through channels like brochures, circulars etc.	S.A	3.825137	3.896104	3.937008
		A	28.96175	28.57143	28.34646
		NO	49.72678	50	50.3937
		D	14.20765	14.28571	14.17323
		SD	3.278689	3.246753	3.149606
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our Company applies the best knowledge to deliver our organizational products and services.	S.A	4.371585	4.545455	5.511811
		A	33.33333	33.11688	33.07087
		NO	46.99545	46.75325	46.45669
		D	13.11475	12.98701	12.59843
		SD	2.185792	2.597403	2.362205
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

The above table 4.62 shows the Manager's Experience wise analysis. The assessment of the study shows that 3.82% of respondents < 5 years' experience, Strongly Agree that "Our company encourages documenting one's expertise for others to use", 29.5% Agreed, 50.81% No opinion, 12.02% Disagreed, 3.82% Strongly Disagreed; 3.89% of respondents between 5-10 years Strongly Agreed from the statement that "Our company encourages documenting one's expertise for others to use", 29.87% Agreed, 50% No Opinion, 12.99% Disagreed, 3.89% Strongly Disagreed; 3.93% of respondents >10 years Strongly Agreed from the statement that "Our company encourages documenting one's expertise for others to use", 29.13% Agreed, 51.18% No Opinion, 12.59% Disagree, 3.14 % Strongly Disagreed.

**Table 4.63: Perception of the Managers on knowledge creation process Combination**

Sr. No	Items	Rating	<5Years	5-10 Years	>10 Years
			39.40 %	32.20 %	27.40 %
1	Our company develops plans based on published information, forecasting etc.	S.A	11.47541	11.68831	11.02362
		A	36.61202	36.36364	37.00787
		NO	40.43716	40.25974	40.94488
		D	9.289617	9.090909	8.661417
		SD	2.185792	2.597403	2.362205
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our company stresses creating manuals and documents on products and services.	S.A	12.02186	11.68831	11.02362
		A	34.97268	35.06494	35.43307
		NO	42.62295	42.85714	43.30709
		D	7.103825	7.792208	7.874016
		SD	3.278689	2.597403	2.362205
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Our company is keen on creating a data-base on products and Service	S.A	8.743169	8.441558	7.874016
		A	38.25137	38.31169	38.58268
		NO	41.53005	41.55844	41.73228
		D	9.289617	9.74026	9.448819
		SD	2.185792	1.948052	2.362205
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our Company develops reports by gathering both technical and financial Information	S.A	10.92896	11.03896	10.23622
		A	38.25137	38.31169	38.58268
		NO	40.98361	40.90909	41.73228
		D	7.103825	6.493506	6.299213
		SD	2.73224	3.246753	3.149606
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

The above table shows the Manager’s Experience wise analysis. The assessment of the study shows that 11.47% of respondents < 5 years’ experience, Strongly Agree that “Our company develops plans based on published information, forecasting etc. ”,36.61% Agreed,40.43% No opinion, 9.28% Disagreed, 2.18% Strongly Disagreed; 11.68% of respondents between 5-10 years Strongly Agreed from the statement that “Our company develops plans based on published information, forecasting etc.”, 36.36% Agreed ,40.25% No Opinion, 9.09% Disagreed, 2.59% Strongly Disagreed; 11.02% of respondents >10 years Strongly Agreed form the statement that “Our company develops plans based on published information, forecasting etc.”, 37% Agreed, 40.94% No Opinion, 8.66% Disagree, 2.36 % Strongly Disagreed.

**Table 4.64: Perception of the Managers on knowledge creation process Internalization**

Sr. No	Items	Rating	<5Years	5-10 Years	>10 Years
			39.40%	32.20%	27.40 %
1	In our company cross functional teams works together for development	S.A	3.278689	3.246753	3.149606
		A	32.24044	32.46753	32.28346
		NO	54.64481	54.54545	54.33071
		D	8.196721	8.441558	7.874016
		SD	1.639344	1.298701	2.362205
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	In Our company teams experiments with improvements and the result are shared with the departments	S.A	3.278689	3.246753	3.149606
		A	32.24044	32.46753	32.28346
		NO	57.37705	57.14286	57.48031
		D	5.464481	5.194805	5.511811
		SD	1.639344	1.948052	1.574803
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	In our company employees search and share new values and thoughts	S.A	3.278689	3.246753	3.149606
		A	38.79781	38.96104	39.37008
		NO	50.27322	50	50.3937
		D	6.557377	6.493506	5.511811
		SD	1.092896	1.298701	1.574803
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our company helps employees to understand and share management vision through group communication	S.A	4.371585	4.545455	3.937008
		A	29.5082	29.87013	29.13386
		NO	59.01639	59.09091	59.05512
		D	4.918033	4.545455	4.724409
		SD	2.185792	1.948052	3.149606
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

The above table shows the Manager’s Experience wise analysis. The assessment of the study shows that 3.27% of respondents < 5 years’ experience, Strongly Agree that “In our company cross functional teams works together for development”, 32.24% Agreed, 54.64% No opinion, 8.19% Disagreed, 1.63% Strongly Disagreed; 3.24% of respondents between 5-10 years Strongly Agreed from the statement that “In our company cross functional teams works together for development”, 32.46% Agreed, 54.54% No Opinion, 8.44% Disagreed, 1.29% Strongly Disagreed; 3.14% of respondents >10 years Strongly Agreed from the statement that “In our company cross functional teams works together for development”, 32.28% Agreed, 54.33% No Opinion, 7.87% Disagree, 2.36 % Strongly Disagreed.

**Table 4.65: Perception of the Managers on Organizational creativity**

Sr. No	Items	Rating	<5Years	5-10 Years	>10 Years
			39.40 %	32.20 %	27.40 %
1	Our company has produced many novel and useful ideas (service/products).	S.A	4.371585	4.545455	3.937008
		A	29.5082	29.87013	29.13386
		NO	55.7377	55.84416	55.90551
		D	9.836066	9.090909	9.448819
		SD	0.546448	0.649351	1.574809
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our company fosters an environment that is conducive to our own ability to produce novel and useful ideas.	S.A	3.278689	3.246753	3.149606
		A	34.97268	35.06494	34.64657
		NO	50.81967	51.2987	51.1811
		D	10.38251	9.090909	10.23622
		SD	0.546448	1.298701	0.787402
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Our company spends much time for producing novel and useful ideas.	S.A	3.278689	3.246753	3.937008
		A	36.61202	37.01299	37.00787
		NO	49.72678	48.7013	49.6063
		D	9.289617	10.38961	8.661417
		SD	1.092896	0.649351	0.787402
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our company considers producing novel and useful ideas as important activities	S.A	3.278689	3.246753	3.149606
		A	33.33333	33.11688	33.07087
		NO	52.45902	52.5974	51.9685
		D	10.38251	10.38961	11.02362
		SD	0.546448	0.649351	0.787402
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

The above table shows the Manager’s Experience wise analysis. The assessment of the study shows that 4.37% of respondents < 5 years’ experience, Strongly Agree that “Our company as produced many novel and useful ideas (service/products)”, 29.5% Agreed, 55.73% No opinion, 9.83% Disagreed, 0.54% Strongly Disagreed; 4.54% of respondents between 5-10 years Strongly Agreed from the statement that “Our company as produced many novel and useful ideas (service/products)”, 29.87% Agreed, 55.84% No Opinion, 9.09% Disagreed, 0.64% Strongly Disagreed; 3.93% of respondents >10 years Strongly Agreed form the statement that “Our company as produced many novel and useful ideas (service/products)”, 29.13% Agreed, 55.90% No Opinion, 9.44% Disagree, 1.57 % Strongly Disagreed.



**Table 4.66: Perception of the Managers on Organizational Performance**

Sr. No	Items	Rating	<5Years	5-10 Years	>10 Years
			39.40 %	32.20 %	27.40 %
1	Compared with key competitors, our company has a greater market share	S.A	3.825137	3.896104	3.937008
		A	28.96175	28.57143	28.34646
		NO	53.55191	53.24675	53.54331
		D	12.02186	12.98701	12.59843
		SD	1.639344	1.298701	1.574803
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Compared with key competitors, our company is growing faster	S.A	2.185792	1.948052	2.362205
		A	34.42623	34.41558	33.85827
		NO	50.81967	51.2987	51.1811
		D	12.02186	11.68831	11.81102
		SD	0.546448	0.649351	0.787402
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Compared with key competitors, our company is more profitable	S.A	3.278689	3.246753	3.149606
		A	31.14754	31.16883	31.49606
		NO	53.00546	52.5974	52.75591
		D	11.47541	11.68831	11.02362
		SD	1.092896	1.298701	1.574803
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Compared with key competitors, our company is more innovative	S.A	2.185792	1.948052	2.362205
		A	35.51913	35.71429	34.64567
		NO	51.91257	51.94805	51.9685
		D	9.289617	9.090909	10.23622
		SD	1.092896	1.298701	0.787402
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

The above table shows the Manager’s Experience wise analysis. The assessment of the study shows that 3.82% of respondents < 5 years’ experience, Strongly Agree that “Compared with key competitors , our company has a greater market share”,28.96% Agreed,53.55% No opinion, 12.02% Disagreed, 1.63% Strongly Disagreed; 3.89% of respondents between 5-10 years Strongly Agreed from the statement that “Compared with key competitors , our company has a greater market share”, 28.57% Agreed ,53.24% No Opinion, 12.98% Disagreed, 1.29% Strongly Disagreed; 3.93% of respondents >10 years Strongly Agreed form the statement that “Compared with key competitors , our company has a greater market share”,28.34% Agreed, 53.54% No Opinion, 12.59% Disagree, 1.57 % Strongly Disagreed.

**Table 4.67 Perception of the Managers on Organizational Culture wrt Collaboration**

Sr. No	Items	Rating	1-10	11-20
			Subordinates	Subordinates
			<b>62.6%</b>	<b>37.40%</b>
1	Our organization members are supportive	S.A	19.31034	19.54023
		A	30.34483	30.45977
		NO	34.48276	34.48276
		D	9.310345	9.195402
		SD	6.551724	6.321839
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our organization members are helpful	S.A	15.17241	15.51724
		A	40.34483	40.22989
		NO	30.34483	29.88506
		D	9.310345	9.770115
		SD	4.827586	4.597701
		<b>Total</b>	<b>100</b>	<b>100</b>
3	There is a willingness to collaborate across organizational units within our organization	S.A	10.34483	10.34483
		A	44.13793	43.67816
		NO	30.68966	31.03448
		D	10.34483	10.34483
		SD	4.482759	4.597701
		<b>Total</b>	<b>100</b>	<b>100</b>
4	There is a willingness to accept responsibility for failure	S.A	11.37391	11.49425
		A	46.55172	46.55172
		NO	25.86207	25.86207
		D	11.03448	10.91954
		SD	5.172414	5.172414
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table shows No of Subordinates Directly report to the Manager wise analysis. 19.31% of respondents between 1-10 subordinates Strongly Agreed with the statement “Our organization members are supportive”, 30.34% Agreed,34.48% No Opinion,9.31% Disagreed, 6.55% Strongly Disagreed; 19.54% of respondents between 11-20 subordinates Strongly Agreed with the statement “Our organization members are supportive”, 30.45% Agreed, 34.48% No Opinion, 9.19% Disagreed, 6.32% Strongly Disagreed.

**Table 4.68: Perception of the Managers on Organizational Culture wrt Trust**

Sr. No	Items	Rating	1-10 Subordinates	11-20 Subordinates
			62.6%	37.40%
1	Our company members have reciprocal faith in other members intentions and behaviors	S.A	7.241379	6.896552
		A	36.2069	36.2069
		NO	41.03448	41.37931
		D	10	10.34483
		SD	5.517241	5.172414
		Total	100	100
2	Our company members have reciprocal faith in others ability	S.A	6.551724	6.321839
		A	34.13793	34.48276
		NO	42.75862	42.52874
		D	12.06897	12.06897
		SD	4.482759	4.597701
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our company members have reciprocal faith in others behaviors to work toward organizational goals.	S.A	6.551724	6.321839
		A	28.27586	28.16092
		NO	48.62069	48.27586
		D	13.44828	13.7931
		SD	3.103448	3.448276
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our company members have reciprocal faith in others decision toward organizational interests than individual interests.	S.A	6.206897	6.321839
		A	43.7931	43.67816
		NO	36.89655	36.78161
		D	9.310345	9.195402
		SD	3.793103	4.022989
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table shows No of Subordinates Directly report to the Manager wise analysis. 7.24% of respondents between 1-10 subordinates Strongly Agreed with the statement “Our Company members have reciprocal faith in other member’s intentions and behaviour”, 36.20% Agreed, 41.03% No Opinion, 10% Disagreed, 5.51% Strongly Disagreed; 6.89% of respondents between 11-20 subordinates Strongly Agreed with the statement “Our Company members have reciprocal faith in other member’s intentions and behaviour”, 36.2% Agreed, 41.37% No Opinion, 10.34% Disagreed, 5.17% Strongly Disagreed.

**Table 4.69: Perception of the Managers on People wrt T-shaped Skills**

Sr. No	Items	Rating	1-10	11-20
			Subordinates	Subordinates
			<b>62.6%</b>	<b>37.40%</b>
1	Our company members can understand not only their own tasks but also others tasks	S.A	8.965517	9.195402
		A	45.17241	45.4023
		NO	27.93103	27.58621
		D	11.72414	12.06897
		SD	6.206897	5.747126
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our company members can make suggestion about others task	S.A	14.82759	14.94253
		A	33.7931	33.90805
		NO	33.10345	33.33333
		D	11.72414	11.49425
		SD	6.551724	6.321839
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our company members can communicate well not only with their department members but also with other department members	S.A	6.896552	6.896552
		A	49.31034	48.85057
		NO	28.62069	29.31034
		D	9.655172	9.770115
		SD	5.517241	5.172414
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our company members are specialists in their own part	S.A	8.62069	8.62069
		A	43.7931	43.67819
		NO	29.65517	29.88506
		D	11.37931	11.48125
		SD	6.551724	6.321839
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table shows No of Subordinates Directly report to the Manager wise analysis. 8.96% of respondents between 1-10 subordinates Strongly Agreed with the statement “Our Company members can understand not only their own tasks but also others tasks”, 45.17% Agreed, 27.93% No Opinion, 11.72% Disagreed, 6.20% Strongly Disagreed; 9.19% of respondents between 11-20 subordinates Strongly Agreed with the statement “Our Company members can understand not only their own tasks but also others tasks”, 45.4% Agreed, 27.58% No Opinion, 12.06% Disagreed, 5.74% Strongly Disagreed.

**Table 4.70: Perception of the Managers wrt Transformation Leadership**

Sr. No	Items	Rating	1-10 Subordinates	11-20 Subordinates
			62.6%	37.40%
1	Our leadership engages in activities involving considerable personal risk in pursuing organizational objectives.	S.A	9.655172	9.770115
		A	25.51724	25.86207
		NO	45.86207	44.82759
		D	14.48276	14.94253
		SD	4.482759	4.597701
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our leadership makes me aware of strongly held values, ideals and aspirations which are shared in common.	S.A	4.137931	4.022989
		A	32.41379	32.18391
		NO	47.24138	47.12644
		D	14.13793	14.94253
		SD	2.068966	1.724138
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our leadership encourages creativity and new idea generation	S.A	5.517241	5.172414
		A	35.86207	35.63218
		NO	42.41379	43.10345
		D	13.10345	12.64368
		SD	3.103448	3.448276
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our leadership encourages two way exchange in communication	S.A	5.862069	5.747126
		A	33.10345	33.33333
		NO	44.13793	44.25287
		D	12.41379	12.06897
		SD	4.482759	4.597701
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table shows No of Subordinates Directly report to the Manager wise analysis. 9.65% of respondents between 1-10 subordinates Strongly Agreed with the statement “Our leadership engages in activities involving considerable personal risk in pursuing organizational objectives”, 25.51% Agreed, 45.86% No Opinion, 14.48% Disagreed, 4.48% Strongly Disagreed; 9.77% of respondents between 11-20 subordinates Strongly Agreed with the statement “Our leadership engages in activities involving considerable personal risk in pursuing organizational objectives”, 25.86% Agreed, 44.82% No Opinion, 14.94% Disagreed, 4.59% Strongly Disagreed.

**Table 4.71: Perception of the Managers wrt IT support**

Sr. No	Items	Rating	1-10 Subordinates	11-20 Subordinates
			62.6%	37.40%
1	Our company provides IT support for communications among organization members	S.A	5.517241	5.172414
		A	29.31034	29.31034
		NO	41.03448	40.8046
		D	15.86207	16.09195
		SD	8.275862	8.62069
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our company provides IT support for searching for and accessing necessary information	S.A	2.413793	2.298851
		A	27.58621	27.58621
		NO	46.89655	47.12644
		D	15.17241	14.94253
		SD	7.931034	7.471264
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our company provides IT support for simulation and prediction	S.A	3.793103	4.022989
		A	32.06897	32.18391
		NO	41.72414	41.37391
		D	17.58621	17.24138
		SD	4.827586	5.172414
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our company provides IT support for systematic storing	S.A	2.068966	1.724138
		A	29.31034	28.73563
		NO	45.86207	46.55172
		D	14.48267	14.36782
		SD	8.275862	8.62069
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table shows No of Subordinates Directly report to the Manager wise analysis. 5.51% of respondents between 1-10 subordinates Strongly Agreed with the statement “Our company provides IT support for communications among organization members”, 29.31% Agreed, 41.03% No Opinion, 15.86% Disagreed, 8.27% Strongly Disagreed; 5.17% of respondents between 11-20 subordinates Strongly Agreed with the statement “Our company provides IT support for communications among organization members”, 29.31% Agreed, 40.80% No Opinion, 16.09% Disagreed, 8.62% Strongly Disagreed.

**Table 4.72: Perception of the Managers on HRM wrt Selection of Employees**

Sr. No	Items	Rating	1-10 Subordinates	11-20 Subordinates
			62.6%	37.40%
1	Our Organization encourages multilingual ability for selection of employees.	S.A	6.896552	6.896552
		A	40.68966	40.8046
		NO	36.55172	36.2069
		D	11.03448	11.49425
		SD	4.827586	4.597701
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our Organization selects the members who works in a team or group efficiently	S.A	4.482759	4.597701
		A	43.10345	42.52874
		NO	39.31034	39.65517
		D	8.62069	8.62069
		SD	4.482759	4.597701
		<b>Total</b>	<b>100</b>	<b>100</b>
3	In our Organization, people who exhibit interest in learning are preferred	S.A	2.068966	1.724138
		A	44.48276	44.25287
		NO	36.55172	36.2069
		D	13.7931	14.36782
		SD	3.103448	3.448276
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our organization considers related professional experience for employees	S.A	4.482759	4.597701
		A	30.34483	30.45977
		NO	49.31034	48.85057
		D	12.75862	12.64368
		SD	3.103448	3.448276
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table shows No of Subordinates Directly report to the Manager wise analysis. 6.89% of respondents between 1-10 subordinates Strongly Agreed with the statement “Our organization encourages multilingual ability for selection of employees”, 40.68% Agreed, 36.55% No Opinion, 11.03% Disagreed, 4.82% Strongly Disagreed; 6.89% of respondents between 11-20 subordinates Strongly Agreed with the statement “Our organization encourages multilingual ability for selection of employees”, 40.80% Agreed, 36.20% No Opinion, 11.49% Disagreed, 4.59% Strongly Disagreed.

**Table 4.73 Perception of the Manager on HRM wrt Training and Development**

Sr. No	Items	Rating	1-10	11-20
			Subordinates	Subordinates
			<b>62.6%</b>	<b>37.40%</b>
1	Our Organization rewards and recognizes trained staff	S.A	5.517241	5.747126
		A	35.17241	35.05747
		NO	42.06897	41.95402
		D	10.68966	10.91954
		SD	6.551724	6.321839
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our Organization encourages employees to participate in internal and external new learning opportunities such as conferences, seminars, university courses, training etc.	S.A	2.758621	2.873563
		A	35.17241	35.05747
		NO	44.13793	44.25287
		D	12.41379	12.64368
		SD	5.517241	5.172414
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our Organization provides training in skills development such as documentation, creative thinking, problem solving, communication, teambuilding etc.	S.A	2.413793	2.298851
		A	44.13793	43.67816
		NO	34.13793	34.48276
		D	15.51724	15.51724
		SD	3.793103	4.022989
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our company provides training by presenting various contexts and many examples in which trainee can expect to use the skills and knowledge in real time environment	S.A	5.517241	5.172414
		A	39.65517	40.22989
		NO	38.62069	38.50575
		D	10.68966	10.91954
		SD	5.517241	5.172414
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table shows No of Subordinates Directly report to the Manager wise analysis. 5.51% of respondents between 1-10 subordinates Strongly Agreed with the statement “Our organization rewards and recognizes trained staff”, 35.17% Agreed, 42.06% No Opinion,10.68% Disagreed,6.55% Strongly Disagreed; 5.74% of respondents between 11-20 subordinates Strongly Agreed with the statement “Our organization rewards and recognizes trained staff”, 35.05% Agreed, 41.95% No Opinion,10.91% Disagreed, 6.32% Strongly Disagreed.



**Table 4.74 Perception of the Managers on HRM wrt Performance Appraisal**

Sr. No	Items	Rating	1-10 Subordinates	11-20 Subordinates
			62.6%	37.40%
1	Our company provides feedback which is useful for improvement	S.A	7.586207	7.471264
		A	45.17241	45.97701
		NO	32.41379	32.18391
		D	11.37931	10.91954
		SD	3.448276	3.448276
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our company provides feedback which is used for ratings, reward and sanctions	S.A	2.758261	2.873563
		A	49.31034	48.85057
		NO	31.72414	32.18391
		D	12.71379	12.06897
		SD	3.793103	4.022989
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our company collects feedback based on personal characteristics not relevant to work	S.A	5.172414	5.172414
		A	41.03448	40.8046
		NO	38.62069	38.50575
		D	11.37931	11.49425
		SD	3.793103	4.022989
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our company collects feedback based on the key process indicators	S.A	6.551724	6.312839
		A	33.10345	33.33333
		NO	43.10345	42.52874
		D	13.10345	13.7931
		SD	4.137931	4.022989
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table shows No of Subordinates Directly report to the Manager Wise analysis. 7.58% of respondents between 1-10 subordinates Strongly Agreed with the statement “Our company provides feedback which is useful for improvement”, 45.17% Agreed, 32.41% No Opinion, 11.37% Disagreed, 3.44% Strongly Disagreed; 7.47% of respondents between 11-20 subordinates Strongly Agreed with the statement “Our company provides feedback which is useful for improvement”, 45.97% Agreed, 32.18% No Opinion, 10.91% Disagreed, 3.44% Strongly Disagreed.

**Table 4.75 Perception of the Managers on HRM wrt Compensation and Reward system**

Sr. No	Items	Rating	1-10	11-20
			Subordinates	Subordinates
			<b>62.6%</b>	<b>37.40%</b>
1	Our organization rewards for measurable competencies	S.A	11.72414	11.49425
		A	26.2069	25.86207
		NO	43.44828	43.67816
		D	13.7931	14.36782
		SD	4.827586	4.597701
		<b>Total</b>	<b>100</b>	<b>100</b>
2	In Our Organization employees are rewarded for new ideas	S.A	7.931034	8.045977
		A	35.51724	35.05747
		NO	40.68966	40.22989
		D	12.75862	13.21893
		SD	3.103448	3.448276
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our organization keeps group incentives clear and simple	S.A	8.275862	8.62069
		A	34.48276	34.48276
		NO	41.03448	40.22989
		D	14.48276	14.94253
		SD	1.724138	1.724138
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our Organization rewards those who brings improvement in work or output	S.A	10.68966	10.34483
		A	29.31034	29.31034
		NO	45.17241	45.4023
		D	10.34483	10.34483
		SD	4.482759	4.597701
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table shows No of Subordinates Directly report to the Manager Wise analysis. 7.58% of respondents between 1-10 subordinates Strongly Agreed with the statement “Our Organization rewards for measurable competencies”,26.2% Agreed, 43.44% No Opinion,13.79% Disagreed,4.82% Strongly Disagreed; 11.49% of respondents between 11-20 subordinates Strongly Agreed with the statement “Our Organization rewards for measurable competencies”,25.86% Agreed,43.67% No Opinion,14.36% Disagreed, 4.59% Strongly Disagreed.

**Table 4.76: Perception of the Managers on Knowledge Creation Process Socialization**

Sr. No	Items	Rating	1-10	11-20
			Subordinates	Subordinates
			<b>62.6%</b>	<b>37.40%</b>
1	Our company stresses sharing experience with suppliers and customers	S.A	15.17241	15.51724
		A	32.75862	32.75862
		NO	29.65517	29.88506
		D	11.72414	11.49425
		SD	10.68966	10.34483
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our company stresses engaging in dialogue with competitors	S.A	10	9.770115
		A	34.82759	35.05747
		NO	36.2069	36.78161
		D	13.7931	13.21839
		SD	5.172414	5.172414
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our Company gathers information inside to develop strategies	S.A	9.310345	9.195402
		A	34.48276	34.48276
		NO	37.24138	36.2069
		D	15.86207	16.66667
		SD	3.103448	3.448276
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our Company encourages observing the work of experts and skilled people	S.A	12.41379	12.06897
		A	40	40.22989
		NO	29.31034	28.73563
		D	13.44828	13.7931
		SD	4.827586	5.172414
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table shows No of Subordinates Directly report to the Manager Wise analysis. 15.17% of respondents between 1-10 subordinates Strongly Agreed with the statement “Our Company stresses sharing experience with suppliers and customers”, 32.75% Agreed, 29.65% No Opinion, 11.72% Disagreed, 10.68% Strongly Disagreed; 15.51% of respondents between 11-20 subordinates Strongly Agreed with the statement “Our Company stresses sharing experience with suppliers and customers”, 32.75% Agreed, 29.88% No Opinion, 11.49% Disagreed, 10.34% Strongly Disagreed.

**Table 4.77: Perception of the Managers on Knowledge Creation Process wrt Externalization**

Sr. No	Items	Rating	1-10	11-20
			Subordinates	Subordinates
			<b>62.6%</b>	<b>37.40%</b>
1	Our Company encourages documenting one’s expertise for others to use.	S.A	3.793103	4.022989
		A	29.65517	29.88506
		NO	51.03448	50.57471
		D	11.72414	11.49425
		SD	3.793103	4.022989
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our Company facilitates exchange of ideas through Social media	S.A	2.068966	1.724138
		A	39.65517	39.08046
		NO	41.72414	42.52874
		D	13.10345	13.21839
		SD	3.448276	3.448276
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our Company circulates suggestions and improvements through channels like brochures, circulars etc.	S.A	3.793103	4.022989
		A	28.96552	28.16092
		NO	50.34483	50.57471
		D	13.7931	13.7931
		SD	3.103448	3.448276
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our Company applies the best knowledge to deliver our organizational products and services.	S.A	4.482759	4.597701
		A	33.44828	33.33333
		NO	46.89655	47.70115
		D	12.75862	12.06897
		SD	2.413793	2.298851
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table shows No of Subordinates Directly report to the Manager Wise analysis. 3.79% of respondents between 1-10 subordinates Strongly Agreed with the statement “Our Company encourages documenting one’s expertise for others to use”, 29.65% Agreed, 51.03% No Opinion, 11.72% Disagreed, 3.79% Strongly Disagreed; 4.02% of respondents between 11-20 subordinates Strongly Agreed with the statement “Our Company encourages documenting one’s expertise for others to use”, 29.88% Agreed, 50.57% No Opinion, 11.49% Disagreed, 4.02% Strongly Disagreed.

**Table 4.78: Perception of the Managers on Knowledge Creation Process wrt Combination**

Sr. No	Items	Rating	1-10 Subordinates	11-20 Subordinates
			62.6%	37.40%
1	Our company develops plans based on published information, forecasting etc.	S.A	11.72414	11.49425
		A	36.55172	36.2069
		NO	40.34483	40.8046
		D	8.965517	9.195402
		SD	2.413793	2.298851
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our company stresses creating manuals and documents on products and services.	S.A	11.72414	11.49425
		A	35.17241	35.05747
		NO	43.10345	43.67816
		D	7.241379	6.896552
		SD	2.758621	2.873563
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our company is keen on creating a data-base on products and service	S.A	8.62069	8.62069
		A	38.27586	37.93103
		NO	41.37931	41.95402
		D	9.655172	9.770115
		SD	2.068966	1.724138
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our Company develops reports by gathering both technical and financial information	S.A	11.03448	10.91954
		A	38.27586	37.93103
		NO	41.03448	40.8046
		D	6.551724	6.896552
		SD	3.103448	3.448276
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table shows No of Subordinates Directly report to the Manager Wise analysis. 11.72% of respondents between 1-10 subordinates Strongly Agreed with the statement “Our Company develops plans based on published information, forecasting etc.”, 36.55% Agreed, 40.34% No Opinion, 8.96% Disagreed, 2.41% Strongly Disagreed; 11.49% of respondents between 11-20 subordinates Strongly Agreed with the statement “Our Company develops plans based on published information, forecasting etc.”, 36.20% Agreed, 40.80% No Opinion, 9.19% Disagreed, 2.29% Strongly Disagreed.

**Table 4.79: Perception of the Managers on Knowledge Creation Process wrt Internalization**

Sr. No	Items	Rating	1-10	11-20
			Subordinates	Subordinates
			<b>62.6%</b>	<b>37.40%</b>
1	In our company cross functional teams works together for development	S.A	3.103448	3.448276
		A	32.75862	32.18391
		NO	54.48276	54.5977
		D	8.275862	8.62069
		SD	1.37931	1.149425
		<b>Total</b>	<b>100</b>	<b>100</b>
2	In Our company teams experiments with improvements and the result are shared with the departments	S.A	3.103448	3.448276
		A	32.75862	32.18391
		NO	57.58621	57.47126
		D	4.827586	5.172414
		SD	1.724138	1.724138
		<b>Total</b>	<b>100</b>	<b>100</b>
3	In our company employees search and share new values and thoughts	S.A	3.103448	3.448276
		A	38.96552	38.50575
		NO	50.34483	50.57471
		D	6.206897	6.321839
		SD	1.37931	1.149425
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our company helps employees to understand and share management vision through group communication	S.A	4.482759	4.597701
		A	29.65517	29.88506
		NO	58.96552	59.1954
		D	4.827586	4.597701
		SD	2.068966	1.724138
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table shows No of Subordinates Directly report to the Manager Wise analysis. 3.10% of respondents between 1-10 subordinates Strongly Agreed with the statement “In our company cross functional teams works together for development”, 32.75% Agreed, 54.48% No Opinion, 8.27% Disagreed, 1.37% Strongly Disagreed; 3.44% of respondents between 11-20 subordinates Strongly Agreed with the statement “In our company cross functional teams works together for development”, 32.18% Agreed, 54.59% No Opinion, 8.62% Disagreed, 1.14% Strongly Disagreed.

**Table 4.80 Perception of the Managers on Organizational Creativity**

Sr. No	Items	Rating	1-10 Subordinates	11-20 Subordinates
			62.6%	37.40%
1	Our company has produced many novel and useful ideas (service/products).	S.A	4.482759	4.597701
		A	29.65517	29.88506
		NO	55.86207	55.17241
		D	9.655172	9.770115
		SD	0.344828	0.574713
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our company fosters an environment that is conducive to our own ability to produce novel and useful ideas.	S.A	3.103448	3.448276
		A	34.82759	35.05747
		NO	51.03448	50.57471
		D	10.68966	10.34483
		SD	0.344828	0.574713
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our company spends much time for producing novel and useful ideas.	S.A	3.103448	3.448276
		A	36.89655	36.78161
		NO	49.65517	48.85057
		D	9.655172	9.770115
		SD	0.689655	1.149425
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our company considers producing novel and useful ideas as important activities	S.A	3.103448	3.448276
		A	33.44828	33.33333
		NO	52.41379	52.29885
		D	10.38966	10.34483
		SD	0.344828	0.574713
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table 4.74 shows No of Subordinates Directly report to the Manager Wise analysis. 4.48% of respondents between 1-10 subordinates Strongly Agreed with the statement “Our company has produced many novel and useful ideas (service/products)”, 29.65% Agreed, 55.86% No Opinion, 9.65% Disagreed, 0.34% Strongly Disagreed; 4.59% of respondents between 11-20 subordinates Strongly Agreed with the statement “Our company has produced many novel and useful ideas (service/products)”, 29.88% Agreed, 55.17% No Opinion, 9.77% Disagreed, 0.57% Strongly Disagreed.

**Table 4.81 Perception of the Managers on Organizational Performance**

Sr. No	Items	Rating	1-10 Subordinates	11-20 Subordinates
			62.6%	37.40%
1	Compared with key competitors, our company has a greater market share	S.A	4.137931	4.022989
		A	28.96552	28.73563
		NO	53.44828	54.02299
		D	12.06897	12.06987
		SD	1.37931	1.149425
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Compared with key competitors, our company is growing faster	S.A	2.068966	1.724138
		A	34.48276	34.48276
		NO	51.37931	51.14943
		D	11.72414	12.06897
		SD	0.344828	0.574713
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Compared with key competitors, our company is more profitable	S.A	3.103448	3.448276
		A	31.37931	31.03448
		NO	53.44828	52.87356
		D	11.03448	11.49425
		SD	1.034483	1.149425
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Compared with key competitors, our company is more innovative	S.A	2.068966	1.724138
		A	35.51724	35.63218
		NO	51.72414	51.72414
		D	9.655172	9.770115
		SD	1.034483	1.149425
		<b>Total</b>	<b>100</b>	<b>100</b>

The table 4.81 shows No of Subordinates Directly report to the Manager Wise analysis. 4.13% of respondents between 1-10 subordinates Strongly Agreed with the statement “Compared with key competitors, our company has a greater market share”, 28.96% Agreed, 53.44% No Opinion, 12.06% Disagreed, 1.37% Strongly Disagreed; 4.02% of respondents between 11-20 subordinates Strongly Agreed with the statement “Compared with key competitors, our company has a greater market share”, 28.73% Agreed, 54.02% No Opinion, 12.06% Disagreed, 1.14% Strongly Disagreed.



**Table 4.82 Perception of the Managers on Organizational Culture wrt Collaboration**

Sr. No	Items	Rating	Line Manager	Senior Manager
			73.4 %	26.6%
1	Our organization members are supportive	S.A.	19.06158	18.69919
		A	30.20528	30.0813
		NO	34.60411	34.95935
		D	9.384164	9.756098
		SD	6.744868	6.504065
		Total	100	100
2	Our Organization members are helpful	S.A	15.24927	15.44715
		A	40.46921	40.65041
		NO	30.20528	29.26829
		D	9.384164	9.756068
		S D	4.692082	4.878049
		Total	100	100
3	There is a willingness to collaborate across organizational units within our organization	S.A.	10.26393	10.56911
		A.	43.98827	43.08943
		NO	30.79179	30.89431
		D	10.55718	10.56911
		SD	4.398827	4.878049
		<b>Total</b>	<b>100</b>	<b>100</b>
4	There is a willingness to accept responsibility for failure	S.A	11.43695	11.38211
		A	46.33431	46.34146
		NO	25.80645	26.01626
		D	11.1437	11.38211
		SD	5.278592	4.878049
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table depicts that 19.061% of Line Managers Strongly Agreed with the statement that “ Our organization members are supportive”, 15.447% of Senior Managers Strongly Agreed with the statement that “ Our organization members are helpful”, 10.569% of Senior Managers Strongly Agreed with the statement that “ There is a willingness to collaborate across organizational units within our organization”, 11.436% of Line Managers Strongly Agreed with the statement that “ There is a willingness to accept responsibility for failure”.

**Table 4.83: Perception of the Managers on Organizational Culture wrt Trust**

Sr. No	Items	Rating	Line Manager	Senior Manager
			73.4%	26.6 %
1	Our company members have reciprocal faith in other members intentions and behaviors	S.A	7.331378	7.317073
		A	36.07038	36.58537
		NO	41.80645	40.65041
		D	9.970647	9.756098
		SD	5.278592	5.691057
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our company members have reciprocal faith in others ability	S.A	6.451613	6.504065
		A	34.0176	34.14634
		NO	42.81525	43.08943
		D	12.31672	12.19512
		SD	4.398827	4.065041
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our company members have reciprocal faith in others behaviors to work toward Organizational goals.	S.A	6.744868	6.504065
		A	28.15249	28.45528
		NO	48.68035	48.78049
		D	13.48974	13.00813
		SD	2.932551	3.252033
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our company members have reciprocal faith in others decision toward organizational interests than individual interests.	S.A	6.158358	6.504065
		A	43.69501	43.90244
		NO	36.95015	37.39837
		D	9.384164	8.130081
		SD	3.812317	4.065041
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table depicts that 7.331% of Line Managers Strongly Agreed with the statement that “ Our Company members have reciprocal faith in other members intentions and behaviour”, 6.504% of Senior Managers Strongly Agreed with the statement “ Our company members have reciprocal faith in others ability”, 6.744% of Line Managers Strongly Agreed with the statement “ Our company members have reciprocal faith in others behaviour to work toward organizational goals”, 6.504% of Senior Managers Strongly Agreed with the statement “ Our company members have reciprocal faith in others decision toward organizational interests than individual interests”.

**Table 4.84: Perception of the Managers on People wrt T-Shaped Skills**

Sr. No	Items	Rating	Line Manager	Senior Manager
			73.4 %	26.6 %
1	Our company members can understand not only their own tasks but also others tasks	S.A	9.090909	8.943089
		A	44.86804	44.71545
		NO	27.85924	28.45528
		D	12.02346	12.19512
		SD	6.158358	5.691057
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our company members can make suggestion about others task	S.A	14.95601	14.63415
		A	33.72434	34.14634
		NO	32.84457	33.33333
		D	11.73021	11.38211
		SD	6.744868	6.504065
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our company members can communicate well not only with their department members but also with other department members	S.A	6.744868	6.504065
		A	49.26686	48.78049
		NO	28.739	29.26829
		D	9.970674	9.756098
		SD	5.278592	5.691057
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our company members are specialists in their own part	S.A	8.504399	8.130081
		A	43.69501	43.90244
		NO	29.61877	30.0813
		D	11.43695	11.38211
		SD	6.744868	6.504065
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table depicts that 9.090% of Line Managers Strongly Agreed with the statement that “ Our company members can understand not only their own tasks but also other tasks”, 14.956% of Line Managers Strongly Agreed with the statement that “ Our company members can make suggestion about others task”, 6.744% of Line Managers Strongly Agreed with the statement that “ Our company members can communicate well not only with their department members but also with other department members”, 8.504% of Line Managers Strongly Agreed with the statement that “ Our company members are specialists in their own part” .

**Table 4.85: Perception of the Managers on Transformational leadership**

Sr. No	Items	Rating	Line Manager	Senior Manager
			73.4 %	26.6%
1	Our leadership engages in activities involving considerable personal risk in pursuing organizational objectives.	S.A	9.384164	9.756098
		A	25.5134	26.01626
		NO	45.7478	45.52846
		D	14.95601	14.63415
		SD	4.398827	4.065041
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our leadership makes me aware of strongly held values, ideals and aspirations which are shared in common.	S.A	4.105572	4.065041
		A	32.25806	32.52033
		NO	47.50733	47.15447
		D	14.07625	13.82114
		SD	2.052786	2.439024
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our leadership encourages creativity and new idea generation	S.A	5.278592	5.691057
		A	35.77713	35.77236
		NO	42.81525	43.08943
		D	12.90323	12.19512
		SD	3.225806	3.252033
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our leadership encourages two way exchange in communication	S.A	5.865103	5.691057
		A	33.13783	33.33333
		NO	43.98827	43.90244
		D	12.60997	12.19512
		SD	4.398827	4.878049
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table depicts that 9.78% of Senior Managers Strongly Agreed with the statement that “ Our leadership engages in activities involving considerable personal risk in pursuing organizational objectives”, 4.10% of Line Managers Strongly Agreed with the statement that “ Our leadership makes me aware of strongly held values, ideals and aspirations which are shared in common”, 5.69% of Senior Managers Strongly Agreed with the statement that “ Our leadership encourages creativity and new idea generation”, 5.86% of Line Managers Strongly Agreed with the statement that “ Our leadership encourages two way exchange in communication”.

**Table 4.86: Perception of the Managers on IT Support**

Sr. No	Items	Rating	Line Manager	Senior Manager
			73.4 %	26.6 %
1	Our company provides IT support for communications among organization members	S.A	5.278592	5.691057
		A	29.61877	30.813
		NO	40.76246	41.46341
		D	15.83578	14.63415
		SD	8.504399	8.130081
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our company provides IT support for searching for and accessing necessary information	S.A	2.346041	2.439024
		A	27.56598	28.45528
		NO	47.50733	47.15447
		D	14.95601	14.63415
		SD	7.624633	7.317073
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our company provides IT support for simulation and prediction	S.A	3.519062	3.252033
		A	31.96481	32.52033
		NO	41.64233	42.27642
		D	17.88856	17.07317
		SD	4.985337	4.878049
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our company provides IT support for systematic storing	S.A	2.052786	2.439024
		A	29.32551	30.0813
		NO	45.7478	46.34146
		D	14.66276	13.00813
		SD	8.211144	8.130081
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table depicts that 5.69% of Senior Managers Strongly Agreed with the statement “ Our company provides IT Support for communications among organization members”, 2.43% of Senior Managers Strongly Agreed with the statement that “ Our company provides IT Support for searching for and accessing necessary information”, 3.51% of Line Managers Strongly Agreed with the statement “Our company provides IT Support for simulation and prediction”, 2.43% of Senior Managers Strongly Agreed with the statement that “ Our company provides IT support for systematic storing”.

**Table 4.87: Perception of the Managers on HRM wrt Selection of Employees**

Sr. No	Items	Rating	Line Manager	Senior Manager
			73.4 %	26.6%
1	Our Organization encourages multilingual ability for selection of employees.	S.A	6.744868	6.504065
		A	40.46911	40.65041
		NO	36.36364	36.58537
		D	11.43695	11.38211
		SD	4.985337	4.878049
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our Organization selects the members who works in a team or group efficiently	S.A	4.398827	4.065041
		A	43.1085	43.08943
		NO	39.58944	39.8374
		D	8.504399	8.130081
		SD	4.398827	4.878049
		<b>Total</b>	<b>100</b>	<b>100</b>
3	In our Organization, people who exhibit interest in learning are preferred	S.A	2.052789	2.439024
		A	44.28152	44.71545
		NO	36.65689	36.58537
		D	14.07625	13.00813
		SD	2.932551	3.252033
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our organization considers related professional experience for employees	S.A	4.398827	4.065041
		A	30.20528	30.89431
		NO	49.26686	49.5953
		D	12.90323	12.19512
		SD	3.225806	3.252033
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table depicts that 6.744% of Line Managers Strongly Agreed with the statement that “ Our organization encourages multilingual ability for selection of employees”, 4.39% of Line Managers Strongly Agreed with the statement that “ Our organization selects the members who works in a team or group efficiently”, 2.43% of Senior Managers Strongly Agreed with the statement “ In Our organization people who exhibit interest in learning are preferred”, 4.39% of Line Managers Strongly Agreed with the statement that “ Our organization considers related professional experience for employees”.

**Table 4.88: Perception of the Managers on HRM wrt Training and Development**

Sr. No	Items	Rating	Line Manager	Senior Manager
			73.4 %	26.6 %
1	Our Organization rewards and recognizes trained staff	S.A	5.571848	5.691057
		A	35.19062	35.77236
		NO	41.93548	42.27642
		D	10.85044	9.756098
		SD	6.451613	6.504065
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our Organization encourages employees to participate in internal and external new learning opportunities such as conferences, seminars, university courses, training etc.	S.A	2.932551	2.439024
		A	35.19062	35.77236
		NO	43.98827	43.90244
		D	12.60997	12.19512
		SD	5.278592	5.691057
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our Organization provides training in skills development such as documentation, creative thinking, problem solving, communication, teambuilding etc.	S.A	2.346041	2.439024
		A	43.98827	43.90244
		NO	34.0176	34.14634
		D	15.83578	15.44715
		SD	3.812317	4.065041
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our company provides training by presenting various contexts and many examples in which trainee can expect to use the skills and knowledge in real time environment	S.A	5.278592	5.691057
		A	39.58944	39.8374
		NO	39.29619	38.21138
		D	10.55718	10.56911
		SD	5.278592	5.691057
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table depicts that 5.57% of Line Managers Strongly Agreed with the statement that “ Our organization rewards and recognizes trained staff”, 2.93% of Line Managers Strongly Agreed with the statement “ Our organization encourages employees to participate in internal and external new learning opportunities such as conferences, Seminars ,University courses, training etc., 2.43% of Senior Managers Strongly Agreed with the statement that “ Our organization provides training in skills development such as documentation, creative thinking, problem solving, communication, team building etc.”, 5.69% of Senior Managers Strongly Agreed that “ The company provides training by presenting various contexts and many examples in which trainee can expect to use the skills and knowledge in real time environment”.

**Table 4.89: Perception of the Managers on HRM wrt Performance Appraisal**

Sr. No	Items	Rating	Line Manager	Senior Manager
			73.4 %	26.6 %
1	Our company provides feedback which is useful for improvement	S.A	7.624633	7.317073
		A	45.16129	45.52846
		NO	32.55132	32.52032
		D	11.1437	11.38211
		SD	3.519062	3.252033
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our company provides feedback which is used for ratings, reward and sanctions	S.A	2.932551	2.439024
		A	49.26686	49.5935
		NO	31.67155	31.70732
		D	12.31672	12.19512
		SD	3.812317	4.065041
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our company collects feedback based on personal characteristics not relevant to work	S.A	5.278592	4.878049
		A	41.05572	41.46341
		NO	38.41642	39.02439
		D	11.73021	11.38211
		SD	3.519062	3.252033
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our company collects feedback based on the key process indicators	S.A	6.451613	6.504065
		A	33.13783	33.33333
		NO	42.81525	43.08943
		D	13.49874	13.00813
		SD	4.105572	4.065041
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table depicts that 7.62% of Line Managers Strongly Agreed that “ Our company provides feedback which is useful for improvement”, 2.93% of Line Managers Strongly Agreed that “ Our company provides feedback which is used for ratings, reward and sanctions”, 5.27% of Line Managers Strongly Agreed with the statement that “ Our company collects feedback based on personal characteristics not relevant to work”, 6.50% of Senior Managers Strongly Agreed that “ Our company collects feedback based on the key process indicators”.



**Table 4.90: Perception of the Managers on HRM wrt Compensation and Reward System**

Sr. No	Items	Rating	Line Manager	Senior Manager
			73.4 %	26.6 %
1	Our organization rewards for measurable competencies	S.A	11.73021	11.38211
		A	26.09971	26.82927
		NO	43.40176	43.08943
		D	14.07625	13.82114
		SD	4.692082	4.878049
		<b>Total</b>	<b>100</b>	<b>100</b>
2	In Our Organization employees are rewarded for new ideas	S.A	7.917889	8.130081
		A	35.45387	35.77263
		NO	40.46921	40.65041
		D	13.19648	12.19512
		SD	2.932551	3.252033
		<b>Total</b>	<b>100</b>	
3	Our organization keeps group incentives clear and simple	S.A	8.211144	8.130081
		A	34.31085	34.95935
		NO	41.05572	41.46341
		D	14.66276	13.82114
		SD	1.759531	1.626016
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our Organization rewards those who brings improvement in work or output	S.A	10.55718	10.56911
		A	29.03226	29.26829
		NO	45.45455	45.52846
		D	10.55718	10.56911
		SD	4.398827	4.065041
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table depicts that 11.73% of Line Managers Strongly Agreed with the statement that “ Our organization rewards for measurable competencies”; 8.13%of Senior Managers Strongly Agreed that “ In our organization employees are rewarded for new ideas”, 8.21% of Line Managers Strongly Agreed that “ Our organization keeps group incentives clear and simple”, 10.56% of Senior Managers Strongly Agreed with the statement that “ Our organization rewards those who brings improvement in work or output”.

**Table 4.91: Perception of the Managers on Knowledge creation process: Socialization**

Sr. No	Items	Rating	Line Manager	Senior Manager
			73.4 %	26.6 %
1	Our company stresses sharing experience with suppliers and customers	S.A	15.24927	15.44715
		A	32.55132	33.33333
		NO	29.91202	30.0813
		D	11.73021	10.56911
		SD	10.55718	10.56911
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our company stresses engaging in dialogue with competitors	S.A	9.970674	9.756098
		A	34.89736	34.95935
		NO	36.07038	36.58537
		D	13.78299	13.82114
		SD	5.278592	4.878049
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our Company gathers information inside to develop strategies	S.A	9.384164	8.943089
		A	34.31085	34.95935
		NO	37.2434	37.39837
		D	15.83578	15.44715
		SD	3.225806	3.252033
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our Company encourages observing the work of experts and skilled people	S.A	12.31672	12.19512
		A	39.8827	39.8374
		NO	29.03226	30.0813
		D	13.48974	13.00813
		SD	5.278592	4.878049
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table depicts that 15.44% of Senior Managers Strongly Agreed that “Our company stresses sharing experience with suppliers and customers “; 9.97% of Line Managers Strongly Agreed that “Our company stresses engaging in dialogue with competitors”; 9.38% of Line Managers Strongly Agreed that “Our company gathers information inside to develop strategies “; 12.31% of Line Managers Strongly Agreed that “ Our company encourages observing the work of experts and skilled people”.

**Table 4.92: Perception of the Managers on the Knowledge creation process: Externalization**

Sr. No	Items	Rating	Line Manager	Senior Manager
			73.4 %	26.6 %
1	Our Company encourages documenting one's expertise for others to use.	S.A	3.812317	3.252033
		A	29.61877	30.0813
		NO	51.02369	51.21951
		D	12.02346	12.19512
		SD	3.519062	3.252033
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our Company facilitates exchange of ideas through Social media	S.A	2.052786	1.626016
		A	39.58944	39.8374
		NO	41.64223	42.27642
		D	13.19648	13.00813
		SD	3.519062	3.252033
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our Company circulates suggestions and improvements through channels like brochures, circulars etc.	S.A	3.519062	3.252033
		A	29.32551	29.26829
		NO	50.14663	50.4065
		D	14.07625	13.82114
		SD	2.932551	3.25033
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our Company applies the best knowledge to deliver our organizational products and services.	S.A	4.398827	4.878049
		A	33.43109	34.14634
		NO	47.21408	46.34146
		D	12.60997	12.19512
		SD	2.346041	2.439024
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table depicts that 3.81% of Line Managers Strongly Agreed with the statement “ Our company encourages documenting one’s expertise for others to use”; 2.052% of Line Managers Strongly Agreed with the statement “ Our company facilitates exchange of ideas through social media”; 3.51% of Line Managers Strongly Agreed with the statement “ Our company circulates suggestions and improvements through channels like brochures, circulars etc.”; 4.87% of Senior Managers Strongly Agreed with the statement “ Our company applies the best knowledge to deliver our organizational products and services”.

**Table 4.93: Perception of the Managers on knowledge creation process: Combination**

Sr. No	Items	Rating	Line Manager	Senior Manager
			73.4 %	26.6 %
1	Our company develops plans based on published information, forecasting etc.	S.A	11.73021	11.38211
		A	36.36364	36.58537
		NO	40.46921	40.65041
		D	9.090909	8.943089
		SD	2.346041	2.439024
		<b>Total</b>		
2	Our company stresses creating manuals and documents on products and services.	S.A	11.73021	11.38211
		A	35.19062	35.77236
		NO	42.81525	43.08943
		D	7.331378	7.317073
		SD	2.932551	2.439024
		<b>Total</b>		
3	Our company is keen on creating a data-base on products and service	S.A	8.504399	8.130081
		A	38.12317	38.21138
		NO	41.64223	41.46341
		D	9.677419	9.756098
		SD	2.052786	2.439024
		<b>Total</b>		
4	Our Company develops reports by gathering both technical and financial information	S.A	11.43695	10.56911
		A	38.12317	38.21138
		NO	40.76246	41.46341
		D	6.744868	6.504065
		SD	2.932551	3.252033
		<b>Total</b>		

The above table predicts that 11.73% of Line Managers Strongly Agreed with the statement that “ Our company develops plans based on published information, forecasting etc.”; 11.73% of Line Managers Strongly Agreed with the statement “ Our company stresses creating manuals and documents on products and services “; 8.50% of Line Managers Strongly Agreed with the statement that “ Our company is keen on creating a data-base on products and services”; 11.43% of Line Managers Strongly Agreed that “ Our company develops reports by gathering both technical and financial information”.

**Table 4.94: Table of the Managers on knowledge creation process: wrt Internalization**

Sr. No	Items	Rating	Line Manager	Senior Manager
			73.4 %	26.6%
1	In our company cross functional teams works together for development	S.A	2.932551	3.252033
		A	32.55132	33.33333
		NO	54.54545	53.65854
		D	8.504399	8.130081
		SD	1.466276	1.626016
	<b>Total</b>	<b>100</b>	<b>100</b>	
2	In Our company teams experiments with improvements and the result are shared with the departments	S.A	3.225806	3.252033
		A	32.55132	33.33333
		NO	57.18475	56.91057
		D	5.278592	4.878049
		SD	1.759531	1.626061
	<b>Total</b>	<b>100</b>	<b>100</b>	
3	In our company employees search and share new values and thoughts	S.A	2.932551	3.252033
		A	39.00293	39.02439
		NO	50.14663	50.4065
		D	6.744868	5.691057
		SD	1.173021	1.626016
	<b>Total</b>	<b>100</b>	<b>100</b>	
4	Our company helps employees to understand and share management vision through group communication	S.A	4.398827	4.065041
		A	29.61877	30.0813
		NO	59.23754	58.53659
		D	4.692082	4.878049
		SD	2.052786	2.439024
	<b>Total</b>	<b>100</b>	<b>100</b>	

The above table predicts that 3.25% of Senior Managers Strongly Agreed with the statement “ In our company cross functional teams works together for development”, 3.25% of Senior Managers Strongly Agreed with the statement “ In our company teams experiments with improvements and the results are shared with the departments”, 3.25% of Senior Managers Strongly Agreed with the statement “ In our company employees search and share new values and thoughts”; 4.39% of Line Managers Strongly Agreed with the statement “ Our company helps employees to understand and share management vision through group communication “.

**Table 4.95: Perception of the Managers on Organizational Creativity**

Sr. No	Items	Rating	Line Manager	Senior Manager
			73.4 %	26.6 %
1	Our company has produced many novel and useful ideas (service/products)	S.A	4.398827	4.065041
		A	29.61877	30.0813
		NO	55.71848	56.53659
		D	9.970674	8.943089
		SD	0.293255	0.813008
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Our company fosters an environment that is conducive to our own ability to produce novel and useful ideas	S.A	2.932551	3.252033
		A	34.89736	34.95935
		NO	51.02639	51.21951
		D	10.85044	8.943089
		SD	0.293255	1.626016
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Our company spends much time for producing novel and useful ideas	S.A	2.932551	3.252033
		A	36.95015	37.39837
		NO	49.56012	48.78049
		D	9.970674	9.756098
		SD	0.58651	0.813008
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Our company considers producing novel and useful ideas as important activities	S.A	3.225806	3.252033
		A	33.43109	34.14634
		NO	52.19941	52.84553
		D	10.85044	8.943089
		SD	0.293255	0.813008
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table depicts that 4.39% of Line Managers Strongly Agreed with the statement “ Our company has produced many novel and useful ideas (service/products); 3.25% of Senior Managers Strongly Agreed with the statement that “ Our company fosters and environment that is conducive to our own ability to produced novel and useful ideas”; 3.25% of Senior Managers Strongly Agreed with the statement that “ Our company spends much time for producing novel and useful ideas”; 3.25% of Senior Managers Strongly Agreed with the statement “ Our company considers producing novel and useful ideas as important activities”.

**Table 4.96: Perception of the Managers on Organizational Performance**

Sr. No	Items	Rating	Line Manager	Senior Manager
			73.4 %	26.6 %
1	Compared with key competitors, our company has a greater market share	S.A	4.105572	4.065041
		A	29.03226	29.26829
		NO	53.37243	52.84553
		D	12.02346	12.19512
		SD	1.466276	1.626016
		<b>Total</b>	<b>100</b>	<b>100</b>
2	Compared with key competitors, our company is growing faster	S.A	2.346041	1.626016
		A	34.31085	34.95935
		NO	51.31965	51.21951
		D	11.73021	11.38211
		SD	11.73021	0.813008
		<b>Total</b>	<b>100</b>	<b>100</b>
3	Compared with key competitors, our company is more profitable	S.A	2.932551	3.252033
		A	31.08504	31.70732
		NO	53.37243	53.65854
		D	11.43956	10.56911
		SD	1.173021	0.813008
		<b>Total</b>	<b>100</b>	<b>100</b>
4	Compared with key competitors, our company is more innovative	S.A	2.052786	1.626016
		A	35.48387	35.77236
		NO	51.90616	52.03252
		D	9.384164	9.756098
		SD	1.173021	0.813008
		<b>Total</b>	<b>100</b>	<b>100</b>

The above table depicts that 4.10% of Line Managers Strongly Agreed with the statement “Compared with key competitors, our company has a greater market share”; 2.34% of Line Managers Strongly Agreed with the statement “ Compared with key competitors, our company is growing faster”; 3.25% of Senior Managers Strongly Agreed with statement “ Compared with key competitors, our company is more profitable”; 2.05% of Line Managers Strongly Agreed with the statement “ Compared with key competitors , our company is more innovative”.

**Table 4.97: Perception of the Managers on Organizational Culture wrt Collaboration**

Sr. No	Items	Rating	SSC	Inter	ITI	DIPLOMA	BACHELOR DEGREE	MASTERS DEGREE
			4.4%	6.1%	32.8%	36.2%	11.2%	9.3%
1	Our organization members are supportive	S.A	23.80952	21.42857	19.07895	17.85714	19.23077	18.60465
		A	28.57143	32.14286	30.26316	32.14286	30.76923	30.23256
		NO	33.33333	28.57143	34.86842	34.52381	34.61538	34.88372
		D	9.52381	10.71429	9.210526	8.928571	9.615385	9.302326
		SD	4.761905	7.142857	6.578947	6.547619	5.769231	6.976744
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our organization members are helpful	S.A	14.28571	14.28571	15.13158	15.47619	15.38462	16.27907
		A	42.85714	39.28571	40.13158	40.47619	40.38462	39.53488
		NO	28.57143	32.14286	30.26316	29.7619	30.76923	30.23256
		D	9.52381	10.71429	9.868421	9.52381	9.615385	9.302326
		SD	4.761905	3.571429	4.605263	4.761905	3.846154	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	There is a willingness to collaborate across organizational units within our organization	S.A	9.52381	10.71429	10.52632	10.11905	9.615385	11.62791
		A	42.85714	42.85714	43.42105	44.04762	44.23077	44.18605
		NO	33.33333	32.14286	30.92105	30.95238	32.69231	30.23256
		D	9.52381	10.71429	10.52632	10.11905	9.615385	9.302326
		SD	4.761905	3.571429	4.605263	4.761905	3.846154	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	There is a willingness to accept responsibility for failure	S.A	9.52381	10.71429	11.18421	11.30952	11.53846	11.62791
		A	42.85714	46.42857	46.71053	46.42857	46.15385	46.51163
		NO	28.57143	25	25.65789	25.59524	25	25.5814
		D	14.28571	14.28571	11.18421	11.30952	11.53846	11.62791
		SD	4.761905	3.571429	5.263158	5.357143	5.769231	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

The above table shows that 23.80% of SSC Qualified respondents strongly Agreed with the statement that “Our organization members are supportive”, 28.57% Agreed; 33.33 of No Opinion; 9.52% Disagreed and 4.76% strongly disagreed with the above statement.



**Table 4.98: Perception of the Managers on Organizational culture wrt Trust**

Sr. No	Items	Rating	SSC	Inter	ITI	DIPLOMA	BACHELOR DEGREE	MASTERS DEGREE
			4.4%	6.1%	32.8%	36.2%	11.2%	9.3%
1	Our company members have reciprocal faith in other members intentions and behaviors	S.A	4.761905	7.142857	7.236842	7.142857	7.692308	6.976744
		A	38.09524	35.71429	36.18421	35.71429	36.53846	37.2093
		NO	38.09524	39.28571	41.44737	41.07143	40.38462	41.86047
		D	9.52381	10.71429	9.868421	10.71429	9.615385	9.302326
		SD	9.52381	7.142857	5.263158	5.357143	5.769231	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our company members have reciprocal faith in others ability	S.A	9.52381	7.142857	6.578974	6.547619	5.769231	6.976744
		A	33.33333	35.71429	34.21053	33.92857	34.61538	32.55814
		NO	38.09524	42.85714	42.10526	42.85714	42.30769	44.18605
		D	14.28571	10.71429	12.5	12.5	13.46154	11.62791
		SD	4.761905	3.571429	4.605263	4.166667	3.846154	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Our company members have reciprocal faith in others behaviors to work toward organizational goals.	S.A	4.761905	7.142857	6.578947	6.547619	5.769231	6.976744
		A	28.57143	28.57143	28.28947	28.57143	28.84615	27.90698
		NO	47.61905	46.42857	48.68421	48.21429	48.07692	48.83721
		D	14.28571	14.28571	13.15789	13.69048	13.46154	13.95349
		SD	4.76905	3.571429	3.289474	2.97619	3.846154	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our company members have reciprocal faith in others decision toward organizational interests than individual interests.	S.A	4.761905	7.142857	5.921053	5.952381	5.769231	6.976744
		A	38.09524	42.85714	44.07895	43.45238	44.23077	44.18605
		NO	42.85714	35.71429	36.84211	36.90476	36.53846	34.88372
		D	9.52381	10.71429	9.210526	9.52381	9.615385	9.302326
		SD	4.761905	3.571429	3.947368	4.166667	3.846154	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

The Table 4.98 depicts that 4.76% of SSC respondents Strongly Agreed with the statement “Our company members have reciprocal faith in other member’s intentions and behaviours”,38.09% Agreed;38.09% No Opinion; 9.52% Disagreed; 9.52% Strongly Disagreed with the above statement.

**Table 4.99: Perception of the Managers on People wrt T-shaped Skills**

Sr. No	Items	Rating	SSC	Inter	ITI	DIPLO MA	BACHEL OR DEGREE	MASTER S DEGREE
			4.4%	6.1%	32.8%	36.2%	11.2%	9.3%
1	Our company members can understand not only their own tasks but also others tasks	S.A	9.52381	10.71429	9.210526	8.928571	9.615385	9.302326
		A	42.85714	46.42857	45.39474	45.2381	44.23077	44.18605
		NO	28.57143	28.57143	27.63158	27.97619	26.92308	27.90698
		D	14.28571	7.142857	11.84211	11.90476	11.53846	11.62791
	SD	4.761905	7.142857	5.921053	5.952381	7.692308	6.976744	
	<b>Total</b>		<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our company members can make suggestion about others task	S.A	14.28571	14.28571	15.13158	14.88095	15.38462	13.95349
		A	33.33333	35.71429	33.55263	33.92857	34.61538	34.88372
		NO	33.33333	32.14286	32.89474	32.7381	32.69231	32.55814
		D	9.52381	10.71429	11.84211	11.90476	11.53846	11.62791
	SD	9.52381	7.142857	6.578947	6.547619	5.769231	6.976744	
	<b>Total</b>		<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Our company members can communicate well not only with their department members but also with other department members	S.A	4.761905	7.142857	6.578947	7.142857	7.692308	6.976744
		A	52.38095	50	49.34211	49.40476	50	48.83721
		NO	28.57143	25	28.94737	28.57143	28.84615	27.90698
		D	9.52381	10.71429	9.868421	9.52381	7.692308	11.62791
	SD	4.761905	7.142857	5.263158	5.357143	5.769231	4.651163	
	<b>Total</b>		<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our company members are specialists in their own part	S.A	9.52381	7.142857	8.552632	8.333333	7.692308	9.302326
		A	47.61905	46.42857	44.07895	44.04762	44.23077	44.18605
		NO	28.57143	28.57143	29.60526	29.7619	28.84615	30.23256
		D	9.52381	10.71429	11.18421	11.30952	13.46154	9.302326
	SD	4.761905	7.142857	6.578947	6.547619	5.769231	6.976744	
	<b>Total</b>		<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

The Table 4.99 depicts that 9.52% of SSC qualified respondents Strongly Agreed with the statement that “Our company members can understand not only their own tasks but also others tasks”, 42.85% Agreed; 28.57% No Opinion; 14.28% Disagreed; 4.76% Strongly Disagreed with the above statement.

**Table 4.100: Perception of the Manager on Transformational leadership**

Sr. No	Items	Rating	SSC	Inter	ITI	DIPLOMA	BACHELOR DEGREE	MASTERS DEGREE
			4.4%	6.1%	32.8%	36.2%	11.2%	9.3%
1	Our leadership engages in activities involving considerable personal risk in pursuing organizational objectives.	S.A	9.52381	10.71429	9.210526	9.52381	9.615385	9.302326
		A	23.80952	25	25	25.59524	25	25.5814
		NO	42.85714	46.42857	46.05263	45.83333	46.15385	46.51163
		D	19.04762	14.28571	15.13158	14.88095	15.38462	13.95349
		SD	4.761905	3.571429	4.605263	4.166667	3.846154	4.651163
	<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	
2	Our leadership makes me aware of strongly held values, ideals and aspirations which are shared in common.	S.A	9.52381	3.571429	3.947368	4.166667	3.846154	4.651163
		A	33.33333	32.14286	32.23684	32.14286	32.69231	32.55814
		NO	38.09524	46.42857	47.36842	47.02381	48.07692	46.51163
		D	14.28571	14.28571	14.47368	14.28571	13.46154	13.95349
		SD	4.761905	3.571429	1.973684	2.380952	1.923077	2.325581
	<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	
3	Our leadership encourages creativity and new idea generation	S.A	4.761905	7.142857	5.263158	5.357143	5.769231	4.651163
		A	33.33333	32.14286	35.52632	35.71429	36.53846	34.88372
		NO	47.61905	42.85714	42.76316	42.85714	42.30769	41.86047
		D	9.52381	14.28571	13.15789	13.09524	11.53846	16.27907
		SD	4.761905	3.571429	3.289474	2.97619	3.846154	2.325581
	<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	
4	Our leadership encourages two way exchange in communication	S.A	4.761905	7.142857	5.921053	5.952381	5.769231	6.976744
		A	28.57143	32.14286	33.55263	32.7381	32.69231	32.55814
		NO	42.85714	42.85714	43.42105	44.04762	44.23077	44.18605
		D	19.04762	14.28571	12.5	12.5	13.46154	11.62791
		SD	4.761905	3.571429	4.605263	4.761905	3.846154	4.651163
	<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	

The above table shows that 9.52% of SSC qualified respondents Strongly Agreed that “Our leadership engages in activities involving considerable personal risk in pursuing organizational objectives”, 28.30% Agreed; 42.85% No Opinion; 19.04% Disagreed; 4.76% strongly Disagreed with the above statement.

**Table 4.101: Perception of the Managers on IT support**

Sr. No	Items	Rating	SSC	Inter	ITI	DIPLOMA	BACHELOR DEGREE	MASTER S DEGREE
			4.4%	6.1%	32.8%	36.2%	11.2%	9.3%
1	Our company provides IT support for communication	S.A	4.761905	7.142857	5.263158	5.357143	5.769231	4.651163
		A	28.57143	28.57143	29.60526	29.16667	28.84615	30.23256
		NO	38.09524	39.28571	40.78947	41.07143	40.38462	41.86047

Sr. No	Items	Rating	SSC	Inter	ITI	DIPLOMA	BACHELOR DEGREE	MASTERS DEGREE
			4.4%	6.1%	32.8%	36.2%	11.2%	9.3%
	tions among organization members	D	19.04762	17.85714	15.78947	16.07143	17.30769	13.95349
		SD	9.52381	7.142857	8.552632	8.333333	7.692308	9.302326
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our company provides IT support for searching for and accessing necessary information	S.A	9.52381	3.571429	2.631579	2.380952	1.923077	2.325581
		A	19.04762	28.57143	27.63158	27.38095	26.92308	27.90698
		NO	42.85714	46.42857	47.36842	47.02381	48.07692	46.51163
		D	14.28571	14.28571	14.47368	15.47619	15.38462	16.27907
		SD	14.28571	7.142857	7.894737	7.738095	7.692308	6.976744
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Our company provides IT support for simulation and prediction	S.A	4.761905	3.571429	3.947368	3.571429	3.846154	4.651163
		A	38.09524	32.14286	32.23684	32.14286	32.69231	32.55814
		NO	33.33333	42.85714	41.44737	41.66667	42.30769	39.53488
		D	19.04762	17.85714	17.76316	17.85714	15.38462	18.60466
		SD	4.761905	3.571429	4.605263	4.761905	5.769231	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our company provides IT support for systematic storing	S.A	4.761905	3.571429	1.973684	2.380952	1.923077	2.325581
		A	28.57143	28.57143	29.60526	29.16667	28.84615	30.23256
		NO	42.85714	46.42857	46.05263	45.83333	46.15385	44.18605
		D	14.28571	14.28571	14.47368	14.28571	15.38462	13.95349
		SD	9.52381	7.142857	7.894737	8.333333	7.692308	9.302326
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

The above table depicts that 4.76% of SSC Qualified Respondents Strongly Agreed with the statement that “Our company provides IT support for communications among organization members”, 28.57% Agreed; 38.09% No Opinion; 19.04% Disagreed; 9.52% strongly Disagreed.

**Table 4.102 Perception of the Managers on HRM wrt selection of Employee**

Sr. No	Items	Rating	SSC	Inter	ITI	DIPLO MA	BACHEL OR DEGREE	MASTERS DEGREE
			4.4%	6.1%	32.8%	36.2%	11.2%	9.3%
1	Our Organization encourages multilingual ability for selection of employees.	S.A	4.761905	7.142857	6.578947	7.142857	7.692308	6.976744
		A	38.09524	39.28571	40.78947	40.47619	40.38462	39.53488
		NO	42.85714	39.28571	36.18421	36.30952	36.53846	37.2093
		D	9.52381	10.71429	11.18421	11.30952	11.53846	11.62791
		SD	4.761905	3.571429	5.263158	4.761905	3.846154	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our Organization selects the members who works in a team or group efficiently	S.A	4.761905	7.142857	4.605263	4.166667	3.846154	4.651163
		A	42.85714	42.85714	42.76316	42.85714	42.30769	44.18605
		NO	38.09524	39.28571	39.47368	39.88095	40.38462	39.56788
		D	9.52381	7.142857	8.552632	8.333333	7.692308	6.976744
		SD	4.761905	3.571429	4.605263	4.761905	5.769231	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	In our Organization, people who exhibit interest in learning are preferred	S.A	9.52381	3.571429	4.605263	4.166667	3.846154	4.651136
		A	28.57143	42.85714	30.26316	30.35714	30.76923	32.55814
		NO	47.61905	35.71429	49.34211	50	50	48.83721
		D	14.28571	14.28571	12.5	12.5	13.46154	11.62791
		SD	4.761905	3.571429	3.289474	2.97619	1.923077	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our organization considers related professional experience for employees	S.A	4.761905	3.571429	4.605263	4.166667	3.846154	4.651163
		A	28.57143	32.14286	30.26316	30.35714	30.76923	32.55814
		NO	47.61905	46.42857	49.34211	50	50	48.83721
		D	14.28571	14.28571	12.5	12.5	13.46154	11.62791
		SD	4.761905	3.571429	3.289474	2.97619	1.923077	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

The Table 4.102 predicts that 4.76% of SSC Qualified respondents Strongly Agreed that “Our organization encourages multilingual ability for selection of employees”, 38.09% Agreed; 42.85% No Opinion; 9.52% Disagreed; 4.76% Strongly Disagreed with the above statement.

**Table 4.103: Perception of the Managers on HRM wrt Training and Development**

Sr. No	Items	Rating	SSC	Inter	ITI	DIPLOMA	BACHELOR DEGREE	MASTERS DEGREE
			4.4%	6.1%	32.8%	36.2%	11.2%	9.3%
1	Our Organization rewards and recognizes trained staff	S.A	4.761905	7.142857	5.921053	5.357143	5.769231	4.651163
		A	38.09524	35.71429	34.86842	35.11905	34.61538	34.88372
		NO	42.82714	39.28571	42.10526	42.2619	42.30769	41.86047
		D	9.52381	10.71429	10.52632	10.71429	11.53846	11.62791
		SD	4.761905	7.142857	6.578947	6.547619	5.769231	6.976744
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our Organization encourages employees to participate in internal and external new learning opportunities such as conferences, seminars, university courses, training etc	S.A	4.761905	3.571429	2.631579	2.97619	1.923077	2.325581
		A	38.09524	35.71429	34.86842	35.11905	34.61538	34.88372
		NO	42.85714	42.85714	44.73684	44.04762	44.23077	46.51163
		D	9.52381	10.71429	12.5	12.5	13.46154	11.62791
		SD	4.761905	7.142857	5.263158	5.357143	5.769231	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Our Organization provides training in skills development such as documentation, creative thinking, problem solving, communication, teambuilding etc	S.A	9.52381	3.571429	2.631579	2.380952	1.923077	2.325581
		A	38.09524	42.85714	44.73684	44.04762	44.23077	44.18605
		NO	33.33333	35.71429	34.21053	33.92857	34.61538	34.88372
		D	14.28571	14.28571	14.47368	15.47619	15.38462	13.95349
		SD	4.761905	3.571429	3.947368	4.166667	3.846154	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our company provides training by presenting various contexts and many examples in which trainee can expect to use the skills and knowledge in real time environment	S.A	4.761905	7.142857	5.263158	5.357143	5.769231	4.651163
		A	38.09524	39.28571	39.47368	39.88095	40.38462	39.53488
		NO	42.85714	35.71429	38.81579	39.28571	38.46154	39.53488
		D	9.52381	10.71429	11.18421	10.11905	9.615385	11.62791
		SD	4.761905	7.142857	5.263158	5.357143	5.769231	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

**Table 4.104: Perception of the Managers on the HRM wrt Performance Appraisal**

Sr. No	Items	Rating	SSC	Inter	ITI	DIPLOMA	BACHELOR DEGREE	MASTERS DEGREE
			4.4%	6.1%	32.8%	36.2%	11.2%	9.3%
1	Our company provides feedback which is useful for improvement	S.A	9.52381	7.142857	7.236842	7.738095	7.692308	6.976744
		A	42.85714	46.42857	45.39474	45.2381	46.15385	46.51163
		NO	28.57143	32.14286	32.89474	32.14286	32.69231	32.55814
		D	14.28571	10.71429	11.18421	11.30952	11.53846	11.62791
		SD	4.761905	3.571429	3.289474	3.517429	1.923077	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our company provides feedback which is used for ratings, reward and sanctions	S.A	4.761905	3.571429	2.631579	2.97619	3.846154	2.325581
		A	47.61905	50	49.34211	48.80952	50	48.83721
		NO	23.80952	32.14286	31.57895	31.54762	30.76923	32.55814
		D	14.28571	10.71429	12.5	12.5	11.53846	11.62791
		SD	9.52381	3.571429	3.947368	4.166667	3.846154	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Our company collects feedback based on personal characteristics not relevant to work	S.A	4.761905	3.571429	5.263158	5.357143	5.769231	4.651163
		A	38.09524	42.85714	40.78947	41.07143	40.38462	41.86047
		NO	42.82714	39.28571	38.15789	38.09524	38.46154	39.53488
		D	9.52381	10.71429	11.84211	11.90476	11.53846	9.302326
		SD	4.761905	3.571429	3.947368	3.571429	3.846154	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our company collects feedback based on the key process indicators	S.A	4.761905	7.142857	6.578947	6.547619	5.769231	6.976744
		A	33.33333	32.14286	33.55263	33.33333	34.61538	32.55814
		NO	38.09524	42.85714	42.76316	42.85714	42.30769	44.18605
		D	19.04762	14.28571	13.15789	13.09524	13.46154	13.95349
		SD	4.761905	3.571429	3.947368	4.166667	3.846154	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

The Table 4.104 predicts that 9.52% of SSC Qualified respondents strongly Agreed with the statement “Our company provides feedback which is useful for improvement”, 42.85% Agreed; 28.57% No Opinion; 14.28% Disagreed; 4.76% Strongly Disagreed with the above statement.

**Table 4.105: Perception of the Managers on HRM wrt Compensation and Reward System**

Sr. No	Items	Rating	SSC	Inter	ITI	DIPLOMA	BACHELOR DEGREE	MASTERS DEGREE
			4.4%	6.1%	32.8%	36.2%	11.2%	9.3%
1	Our organization rewards for measurable competencies	S.A	9.52381	10.71429	11.84211	11.90476	11.53846	11.62791
		A	28.57143	28.57143	26.31579	26.19048	26.92308	25.5814
		NO	42.85714	42.85714	43.42105	42.85714	44.23077	44.18605
		D	14.28571	14.28571	13.81579	14.28571	13.46154	13.95349
		SD	4.761905	3.571429	4.605263	4.761905	3.846154	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	In Our Organization employees are rewarded for new ideas	S.A	9.52381	7.142857	7.894737	7.738095	7.692308	6.976744
		A	33.33333	35.71429	35.52632	35.11905	34.61538	34.88372
		NO	38.09524	39.28571	40.78947	40.47619	40.38462	41.86047
		D	14.28571	14.28571	12.5	13.69048	13.46154	13.95349
		SD	4.761905	3.571429	3.289474	2.97619	3.846154	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Our organization keeps group incentives clear and simple	S.A	9.52381	7.142857	7.894737	8.333333	7.692308	9.302326
		A	33.33333	35.71429	34.21053	33.92857	34.61538	34.88372
		NO	42.85714	42.85714	41.44737	41.07143	40.38462	41.86047
		D	4.761905	10.71429	14.47368	14.88095	15.37462	11.62971
		SD	9.52381	3.571429	1.973684	1.785714	1.923077	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our Organization rewards those who brings improvement in work or output	S.A	9.52381	10.71429	10.52632	10.71429	9.615385	11.62791
		A	28.57143	28.57143	28.94737	29.16667	28.84615	27.90698
		NO	42.85714	46.42857	45.39474	45.2381	46.15385	46.51163
		D	14.28571	10.71429	10.56632	10.71429	11.53846	9.302326
		SD	4.761905	3.571429	4.605263	4.166667	3.846154	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

The above table 4.105 depicts that 4.4% of SSC Qualified respondents Strongly Agreed with the statement “Our organization rewards for measurable competencies “, 28.57% Agreed; 42.85% No Opinion; 14.28% Disagreed; 4.76% strongly Disagreed with the statement.



**Table 4.106: Perception of the Managers on knowledge Creation Process Socialization**

Sr. No	Items	Rating	SSC	Inter	ITI	DIPLO MA	BACHE LOR DEGRE E	MASTER S DEGRE E
			4.4%	6.1%	32.8%	36.2%	11.2%	9.3%
1	Our company stresses sharing experience with suppliers and customers	S.A	19.04762	14.28571	15.13158	15.47619	15.38462	16.27907
		A	33.33333	35.71429	32.89474	32.7381	32.69231	32.55814
		NO	28.57143	28.57143	29.60526	29.16667	28.84615	27.90698
		D	9.52381	10.71429	11.84211	11.90476	11.53846	11.62791
		SD	9.52381	10.71429	10.52632	10.71429	11.53846	11.62791
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our company stresses engaging in dialogue with competitors	S.A	9.52381	10.71429	9.868421	10.11905	9.615385	9.302326
		A	33.33333	35.71429	34.86842	35.11905	34.61538	34.88372
		NO	38.09524	35.71429	36.14821	36.30952	36.53846	37.2093
		D	14.28571	14.28571	13.81579	13.09524	13.46154	13.95349
		SD	4.761905	3.571429	5.263158	5.357143	5.769231	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Our Company gathers information inside to develop strategies	S.A	9.52381	10.71429	9.210526	9.52381	9.615385	9.302326
		A	33.33333	35.71429	34.86842	34.52381	34.61538	34.88372
		NO	33.33333	32.14286	36.84211	36.90476	36.53846	37.2093
		D	19.04762	17.85714	15.78947	16.07143	15.38462	16.27907
		SD	4.761905	3.571429	3.289474	2.97619	3.846154	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our Company encourages observing the work of experts and skilled people	S.A	14.28571	10.71429	12.5	12.5	11.53846	11.62791
		A	42.85714	39.28571	40.13158	39.88095	40.38462	39.53488
		NO	23.80952	32.14286	28.94737	29.16667	28.84615	30.23256
		D	14.28571	14.28571	13.15789	13.09524	13.46154	13.95349
		SD	4.761905	3.571429	5.263158	5.357143	5.769231	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

The above table 4.106 depicts 19.04% of SSC Qualified respondents that “Our company stresses sharing experience with suppliers and customers”, 33.33% Agreed; 28.57% No Opinion; 9.52% Disagreed; 9.52% strongly Disagreed with the statement.

**Table 4.107: Perception of the Managers on knowledge creation Process Externalization**

Sr. No	Items	Rating	SSC	Inter	ITI	DIPLO MA	BACHE LOR DEGRE E	MASTE RS DEGRE E
			4.4%	6.1%	32.8%	36.2%	11.2%	9.3%
1	Our Company encourages documenting one's expertise for others to use.	S.A	4.761905	3.571249	9.347368	3.571429	3.846154	4.651163
		A	28.57143	28.57143	29.60526	29.7619	28.84615	30.23256
		NO	52.38095	50	50.65789	51.19048	51.92308	51.16279
		D	9.52381	14.28571	11.84211	11.90476	11.53846	9.302326
		SD	4.761905	3.571429	3.947368	3.571429	3.846154	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our Company facilitates exchange of ideas through Social media	S.A	9.52381	3.571429	1.973684	1.785714	1.923077	2.325581
		A	38.09524	39.28571	39.47368	39.88095	40.38462	39.53488
		NO	28.57143	39.28571	42.10526	41.66667	42.30769	41.86047
		D	19.04762	14.28571	13.15789	13.09524	11.53846	13.95349
		SD	4.761905	3.571429	3.289474	3.571429	3.846154	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Our Company circulates suggestions and improvements through channels like brochures, circulars etc.	S.A	4.761905	3.571429	3.947368	3.571429	3.846154	4.651163
		A	33.33333	28.57143	28.94737	29.16667	28.84615	27.90698
		NO	42.85714	50	50	50	50	51.16279
		D	14.28571	14.28571	13.81579	14.28571	13.46154	13.95349
		SD	4.761905	3.571429	3.289474	2.97619	3.846154	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our Company applies the best knowledge to deliver our organization al products and services.	S.A	4.761905	3.571429	4.605263	4.761905	3.846154	4.651163
		A	33.33333	32.14286	32.89474	33.33333	32.69231	32.55814
		NO	42.85714	46.42857	47.36842	47.02381	46.15385	46.51163
		D	9.52381	14.28571	12.5	12.5	13.46154	11.62791
		SD	9.52381	3.571429	2.631579	2.380952	3.846154	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

**Table 4.108: Perception of the Managers on Knowledge Creation Process: Combination**

Sr. No	Items	Rating	SSC	Inter	ITI	DIPLOMA	BACHELOR DEGREE	MASTERS DEGREE
			4.4%	6.1%	32.8%	36.2%	11.2%	9.3%
1	Our company develops plans based on published information, forecasting etc.	S.A	9.52381	10.71429	11.84211	11.90476	11.53846	11.62791
		A	38.09524	35.71429	36.18241	36.90952	36.53846	37.2093
		NO	38.09524	39.28571	40.78947	40.47619	40.38462	39.53488
		D	9.52381	10.71429	8.552632	8.928571	9.615385	9.302326
		SD	4.761905	3.571429	2.631579	2.380952	1.923077	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our company stresses creating manuals and documents on products and services.	S.A	9.52381	10.71429	11.84211	11.90476	11.53846	11.62791
		A	33.33333	35.71429	34.86842	35.11905	34.61538	34.88372
		NO	42.85714	42.85714	42.76316	42.85714	42.30769	44.18605
		D	9.52381	7.142857	7.894737	7.142857	9.615385	6.976744
		SD	4.761905	3.571429	2.631579	2.97619	1.923077	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Our company is keen on creating a data- base on products and service	S.A	9.52381	7.142857	8.552632	8.333333	7.692308	9.302326
		A	42.85714	39.28571	38.15789	38.09524	38.46154	37.2093
		NO	33.33333	42.85714	42.10526	41.66667	42.30769	41.86047
		D	4.761905	7.142857	9.210526	9.52381	9.615385	9.302326
		SD	9.52381	3.571429	1.973684	2.380952	1.923077	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our Company develops reports by gathering both technical and financial information	S.A	9.52381	10.71429	11.18421	10.71429	11.53846	11.62791
		A	38.09524	39.28571	38.15789	38.09524	38.46154	37.2093
		NO	42.82714	39.28571	40.78947	41.07143	40.38462	41.86047
		D	4.761905	7.142857	6.578947	7.143857	5.769231	6.976744
		SD	4.761905	3.571429	3.289474	2.97619	3.846154	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

The above table 4.108 predicts that 9.52% of SSC qualified respondents strongly Agreed with the statement that “Our company develops plans based on published information, forecasting etc.”, 38.09% Agreed; 38.09% No Opinion; 9.52% Disagreed; 4.76% strongly Disagreed with the statement.

**Table 4.109 Perception of the Managers on Knowledge Creation Process: Internalization**

Sr. No	Items	Rating	SSC	Inter	ITI	DIPLOMA	BACHELOR DEGREE	MASTERS DEGREE
			4.4%	6.1%	32.8%	36.2%	11.2%	9.3%
1	In our company cross functional teams works together for development	S.A	4.761905	3.571429	3.289474	2.97619	3.846154	2.325581
		A	33.33333	32.14286	32.89474	32.14286	32.69231	32.55814
		NO	47.61905	53.57143	53.94737	54.16667	53.84615	55.81395
		D	9.52381	7.142857	8.552632	8.928571	7.692308	6.976744
		SD	4.761905	3.571429	1.315789	1.785714	1.923077	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>		<b>100</b>	<b>100</b>	<b>100</b>
2	In Our company teams experiments with improvements and the result are shared with the departments	S.A	4.761905	3.571429	2.631579	2.97619	3.846154	2.325581
		A	28.57143	35.71429	32.89474	32.7381	32.69321	32.55814
		NO	57.14286	53.57143	57.23684	57.14286	55.76923	58.13953
		D	4.761905	3.571429	5.263158	5.357143	5.769231	4.651163
		SD	4.761905	3.571429	1.973684	1.785714	1.923077	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>		<b>100</b>	<b>100</b>	<b>100</b>
3	In our company employees search and share new values and thoughts	S.A	4.761905	3.571429	3.289474	2.97619	3.846154	2.325581
		A	38.09524	39.28571	38.81579	38.69048	38.46154	37.2093
		NO	47.61905	42.85714	50	50	50	51.16279
		D	4.761905	7.142857	6.578947	7.142857	5.769231	6.976744
		SD	4.761905	7.142587	1.315789	1.190476	1.923077	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>		<b>100</b>	<b>100</b>	<b>100</b>
4	Our company helps employees to understand and share management vision through group communication	S.A	4.761905	7.142857	4.605263	4.166667	3.846154	4.651163
		A	33.33333	25	29.60526	29.7619	28.84615	30.23256
		NO	47.61905	60.71429	59.21053	58.92857	61.53846	58.13953
		D	4.761905	3.571429	4.605263	4.761905	3.846154	4.651163
		SD	9.52381	3.571429	1.973684	2.380952	1.923077	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>		<b>100</b>	<b>100</b>	<b>100</b>

The above table 4.109 depicts that 4.76% of SSC Qualified Respondents Strongly Agreed with the statement “In our company cross functional teams works together for development”, 33.33% Agreed; 47.61% No Opinion; 9.52% Disagreed; 4.76% strongly Disagreed with the statement.

**Table 4.110: Perception of the Managers on Organizational Creativity**

Sr. No	Items	Rating	SSC	Inter	ITI	DIPLOMA	BACHELOR DEGREE	MASTERS DEGREE
			4.4%	6.1%	32.8%	36.2%	11.2%	9.3%
1	Our company has produced many novel and useful ideas (service/products).	S.A	4.761905	3.571429	4.605263	4.166667	3.846154	4.651163
		A	28.57143	28.57143	29.60526	29.7619	28.84615	30.23256
		NO	52.38095	53.57143	55.26316	55.35714	55.76923	51.16279
		D	9.52381	10.71429	9.868421	10.11905	9.615385	9.302326
		SD	4.761905	3.571429	0.657895	0.595238	1.923077	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Our company fosters an environment that is conducive to our own ability to produce novel and useful ideas.	S.A	9.52381	7.142857	3.289474	2.97619	3.846154	2.325581
		A	28.57143	25	34.86842	35.11905	34.61538	34.88372
		NO	47.61905	50	51.31579	51.19048	50	48.83721
		D	9.52381	10.71429	9.210526	9.52381	7.692308	11.62791
		SD	4.761905	7.142857	1.315789	1.190476	3.846154	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Our company spends much time for producing novel and useful ideas.	S.A	4.761905	3.571429	3.289474	2.97619	3.846154	2.325581
		A	38.09524	35.71429	36.84211	36.90476	36.53846	37.2093
		NO	47.61905	50	49.34211	49.40476	50	46.51163
		D	4.761905	3.571429	9.868421	10.11905	5.769231	11.62791
		SD	4.761905	7.142857	0.657895	0.595238	3.846154	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Our company considers producing novel and useful ideas as important activities	S.A	4.761905	3.571429	3.289474	2.97619	3.846154	2.325581
		A	28.57143	32.14286	33.55263	33.33333	32.69231	32.55814
		NO	42.85714	46.42857	52.63158	52.38095	51.92308	51.16279
		D	14.28571	10.71429	9.868421	10.71429	7.692308	11.62791
		SD	9.52381	7.142857	0.657895	0.595238	3.846154	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>

A table 4.110 depicts that 4.76% of SSC qualified respondents Strongly Agreed with the statement “Our company has produced many novel and useful ideas (service/products)”, 28.57% Agreed; 52.38% No Opinion; 9.52% Disagreed; 4.76% strongly Disagreed with the statement.

**Table 4.111: Perception of the Managers Organizational Performance**

Sr. No	Items	Rating	SSC	Inter	ITI	DIPLOMA	BACHELOR DEGREE	MASTERS DEGREE
			4.4%	6.1%	32.8%	36.2%	11.2%	9.3%
1	Compared with key competitors, our company has a greater market share	S.A	9.52381	7.142857	3.947368	4.166667	3.846154	4.651163
		A	23.80952	25	28.94737	29.16667	28.84615	27.90698
		NO	47.61905	53.57143	53.28947	52.97619	53.84615	53.48837
		D	14.28571	10.71429	12.5	11.90476	11.53846	11.62791
		SD	4.76905	3.571429	1.315789	1.785714	1.923077	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
2	Compared with key competitors, our company is growing faster	S.A	4.761905	3.571429	1.973684	1.785714	1.923077	2.325581
		A	38.09254	35.71429	34.21053	34.52381	34.61538	34.88372
		NO	38.09524	46.42857	51.31579	51.19048	51.92308	46.51163
		D	9.52381	10.71429	11.84211	11.90476	7.692308	11.62791
		SD	9.52381	3.571429	0.657895	0.595238	3.846154	4.651163
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
3	Compared with key competitors, our company is more profitable	S.A	4.761905	3.571429	3.289474	2.97619	3.846154	2.325581
		A	28.57143	28.57143	31.57985	30.95238	28.84615	30.23256
		NO	47.61905	53.57143	52.63158	52.97619	53.84615	53.48837
		D	9.52381	10.71429	11.18421	11.90476	11.53846	11.62791
		SD	9.52381	3.571429	1.315789	1.190476	1.923077	2.325581
		<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
4	Compared with key competitors, our company is more innovative	S.A	4.761905	7.142857	1.973684	1.785714	1.923077	2.325581
		A	28.57143	35.71429	35.52632	35.71429	34.61538	34.88372
		NO	52.38095	42.85714	51.97368	51.78571	51.92308	51.16279
		D SD	9.52381	7.142857	9.210526	9.52381	9.615385	9.302326
		<b>Total</b>	<b>4.761905</b>	<b>7.14287</b>	<b>1.315789</b>	<b>1.190476</b>	<b>1.923077</b>	<b>2.325581</b>
		<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	

The above table depicts that 9.52% strongly Agreed that “Compared with key competitors, our company has a greater market share”, 23.80% Agreed; 47.61% No Opinion; 14.28% Disagreed; 4.76% strongly Disagreed with the statement.

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## Chapter 5

### Findings and Suggestions

The aim of the present chapter is to provide Suggestions and Findings leading to building Knowledge Management Enablers in SME's which will further lead to the organizational performance.

#### 5.1 Major Findings of the Study:

##### 5.1.1 Growth of Textile Industry:

Earlier textile mills were moderately big sized and became a non-constraining factor with the advent of power loom sector. As a result the power loom sector enabled minor weavers to create and promote their own fabrics. They are in direct competition with textile mills at large. An additional shift in the market is regarding entrepreneurship. Technocrats have been equipped to have small market share in Ginning, Spinning and processing as well as in weaving mills.

##### 5.1.2 History of Textile Industry:

The improvement in the World Textile Industry started in Britain as the weaving and spinning machines were developed in that region. Although the market was begun in UK, till in 19th century, the textile products generate transferred to Europe and to North America following mechanization procedure in those places. From time to time Japan, India and China took part in industrializing their economies and concentrated more in that field. The development of transportation and communication facilities facilitated the road of transaction of localized skills and textile art among various countries.

##### 5.1.3 Development of Textile Industry in India:

The Indian textiles and apparels business is among the earliest industries in India having evolved impressively from a household to tiny scale sector. It is the biggest in the field with a tremendous raw materials as well as textiles manufacturing base. It secured as one of the most crucial sectors of the Indian economic system in terms of output, international exchange earnings as well as engaging labor force thereby adding tremendously to the National exchequer.

This field has a distinctive position as a self-reliant industry, by the generation of raw materials on the delivery of finished items, with substantial value addition in each phase of processing. It has vast potential for development of employment opportunities in the farming and manufacturing in the decentralized and organized sectors of urban and rural areas. Predominant engagement of labor especially for females and the disadvantaged in the solidarity is noteworthy.



Therefore, the expansion and all round development of this field has an immediate bearing on the advancement of the economic system.

#### **5.1.4 Modern Textile Industry – A Complex Entity:**

The beginning of globalization and financial liberalization, the country has presented brand new opportunities and challenges to the Indian Textile Industry. The intense worldwide competition of textiles has activated brand new investments as well as cost cutting measures. Technology has considerably improved the effectiveness of transforming cotton fiber into yarn. Consistent enhancement of production, reduction of waste improved efficiency is the immediate leads of success in the textile industry.

#### **5.1.5 Present Status of Textile Industry in India:**

There is huge opportunity for Textile Industry to grow and enhance contribution the market share in domestic as well as international market. Research and Development of brand new product and development offers extra target in Indian business in an effort to progress the value chain and get a greater worldwide market share. The areas of concentration include more recent specialized fabric, quicker turnaround time for design samples, purchasing style samples and sampling laboratories. More and more emphasis asserted to the increased usage of Computer Aided Design to acquire the developing capability in the business. Additionally we need to invest more in trend forecasting to enable steady growth of the industry in the country.

### **5.2 Knowledge Management Practices in Small and Medium Textile Enterprises**

The SSIs / SME's form the backbone of Indian Textile Industry (except in spinning). It has been noted that inevitable concentrate on the capacity and putting together the SME's is the technique of building Textile Industry in India. Another characteristic of the Indian Textile Industry is location of the SMEs in defined clusters. Different clusters, throughout the nation, have emerged for identifiable tasks over a period of time. SME's are utilizing Knowledge Management Process for innovative products as well as services. The groups produce a brand new ideas which increases overall effectiveness and organizational functionality for sustainable competitive advantage. This section is concerned with the hypotheses of both, knowledge management enablers and knowledge creation process.

#### **5.2.1 Perceptions of the Managerial Staff on Organizational Culture:**

An appropriate culture motivates individuals to develop as well as share information in an organization. Organizational culture is believed to be the most significant input to the highly effective knowledge management and organizational learning. The corporate culture decides values, beliefs and work systems which could motivate or even impede knowledge development in addition to knowledge sharing. By using Factor and Multiple regression analysis, Organizational culture is discovered favorably with the knowledge Creation process.

### **5.2.2 Perceptions of the Managerial Staff on Trust:**

Employees within SME's share knowledge; Organizational members imbibe high level of trust and optimism about their relationship with each other. The degree of trust that is present in between its employees, subunits, within the organization significantly influences the amount of knowledge that passes both between people and to the firm's databases. By applying Factor and Multiple regression analysis, we discover that Trust is positively associated with knowledge creation process.

### **5.2.3 Perceptions of the Managerial Staff on Collaboration:**

Collaboration highlights the ' Shared context'; this means a shared understanding of an organization's internal and external world's and how they are connected. Outside effort is crucial for businesses that would like to extend the company boundaries and innovate about markets as well as business models. By applying Factor as well as multiple regression analysis, Collaboration is positively associated with knowledge creation process.

### **5.2.4 Perceptions of the Managerial Staff on T Shaped Skills:**

People with T-shaped skills are predominantly important for knowledge creation since they're able to integrate several knowledge assets. They've the capacity both to combine practical and theoretical knowledge and to observe how the branch of their knowledge interacts with various other branches. Thus, Managers in SME's with T shaped skills are able to expand their competence across several functional areas and will create new knowledge. By using Factor analysis and Multiple regression analysis, T shaped skills are seen to be favorably related to knowledge creation process.

### **5.2.5 Perceptions of the Managerial Staff on Transformational Leadership:**

Today leadership establishes solving problems for achieving organizational outcome with the management. Leaders provide the environment where workers create knowledge and will affect the amounts of creativity of the organization. Charismatic and transformational leadership theories offer a useful lens for understanding the way the leaders influence the management of organizational knowledge. Transformational leadership is among the best leadership types for knowledge organizations. Applying Factor analysis and multiple regression analysis, we discover that Transformational leadership is positively associated with Knowledge Creation Process.

### **5.2.6 Perceptions of the Managerial Staff on IT Support:**

With the help of IT support the companies facilitate the communication processes, coordination, collaboration and teamwork. Additionally it was claimed that in SME's an intranet is able to support personal learning (conversion of tacit knowledge to Explicit knowledge) through provision of features, like laptop simulation, learning-by-doing) etc. Thus by using Factor analysis along with Multiple regression analysis, IT support was rediscovered to favorably with Knowledge Creation Process.

### **5.2.7 Perceptions of the Managerial Staff on Human Resource Management:**

Knowledge management and human resources management initiatives are focused on harnessing the available knowledge assets. They prevent knowledge from walking out of the door. Hence, there is a need of continuous integration between the knowledge management initiatives and the HR policies of the organization. Today Managers in SME's have realized the importance of HRM practices. By Factor Analysis and Multiple regression analysis, HRM was found to be positively related to Knowledge Creation Process.

### **5.2.8 Perceptions of the Managerial Staff on Selection of Employees:**

In this particular era of Knowledge economy, the knowledge transfer and sharing are vital for creating a competitive advantage. The performance of the Human Resource Manager is to select and recruit people who would subscribe to the culture of sharing information and knowledge dissemination. Nevertheless, it is pointed out that revolutionary organizations resort to the selection of people, with both right abilities as well as correct attitudes. They have been labeled as important to the project team's potential in integration of information from diverse sources. By using Factor analysis along with multiple regression analysis, the Selection of employees is seen favorably associated with Knowledge Creation Process.

### **5.2.9 Perceptions of the Managerial Staff on Training and Development:**

In recent times Knowledge management initiatives laid emphasis on second generation systems with a focus on knowledge generation whereas the first generation focused on knowledge codification and sharing. Knowledge creation is a dynamic and continuous process and involves to capture and conversion of tacit knowledge into explicit knowledge. Hence, the Training and development programs for manager's highlights in enhancing of existing knowledge, resulting in learning and development. This function of learning should be captured into the knowledge base of the organization. Knowledge Management Strategies highlights the codification and personalization methods. These methods involve organizations to employ various kinds of individuals and teach them accordingly. Consequently by using Factor analysis and multiple regression the Training and Development was seen being favorably associated with Knowledge Creation Process.

### **5.2.10 Perceptions of the Managerial Staff on Compensation and Reward System:**

Research studies have clearly established that people are not willing to share data unless they are rewarded for it. In order to maximize the importance of knowledge sharing, workers must understand the following: The experience and sharing of knowledge provided to them as individuals is advantageous. Senior management recognizes the sharing of knowledge is all paramount. Knowledge sharing has become a fundamental component of any employee's daily functionality. A compensation/reward system in place to identify and promote personnel who adopt that completely new behavior is the order of the day. Consequently, the organization must have most appropriate incentive and reward system which could acknowledge functionality and sufficiently reward people who share knowledge among themselves and vice versa in the business.

KM techniques view rewards, measurement and effort differently. There are diverse opinions regarding whether businesses have to expose distinct incentives to inspire knowledge development and sharing. By using Factor analysis and multiple regression analysis we discover that Compensation and Reward system was positively linked to Knowledge Creation Process.

#### **5.2.11 Perceptions of the Managerial Staff on Performance Appraisal System:**

One of the most visible shifts in performance measurement is that people are valued for skills, performance and competencies than for faithfulness. Hence, these actions, without acknowledging seniority, inducted to be the grounds for incentives and rewards. Performance management identifies who or what, provides the crucial functionality with respect to business strategy goals and guarantees that efficiency is properly rewarded. A managerial staff member plays a crucial role determining the performance appraisal systems for staff. By applying Factor and Multiple regression analysis one can evaluate that Performance Appraisal was positively linked to Knowledge Creation Process.

#### **5.2.12 Perceptions of the Managerial Staff on Knowledge Creation Process:**

Knowledge plays a crucial role in the capabilities of a company. It also stresses the current understanding by claiming it is creative and can serve as the base for generating brand new ideas or reconfiguring present ones. The findings indicate it's the co-presence and co joint usage of absorption and integration which offers the very foundation of constant innovation.

Consequently Manager's recognize the different tasks within SME's of knowledge creation unleash organizational creativity. It is the intermediate variable between the knowledge management enablers and organizational creativity. By using Factor analysis along with multiple regression analysis where Knowledge Creation Process was discovered to be favorably regarding Organizational Creativity.

#### **5.2.13 Perceptions of the Managerial Staff on Organizational Creativity and Organizational Performance:**

Organizational innovation is the successful implementation of innovative ideas inside a company. It is used for long-term organizational success. Innovative management emerges as a platform for practical ideas to boost organizational functionality in progressively competitive times. Scholars have connected innovativeness to organizational functionality, hinting that a firm must be imaginative "to gain a competitive advantage".

Without creativity, organizations might fail to adjust to the inner and outside changes, and therefore drop their knowledge advantage. SME's Organizational internal efficiency is evaluated by using output measures including growth rate, successfulness, profitability, market share, and the innovativeness of the company in relation to its most important competitors. Improvements of creativity could result in better organizational performance.

Applying Factor analysis and multiple regression analysis, we discover that Organizational Creativity was favorably associated with Organizational performance.

### **5.3 Suggestions for Enhancing the Knowledge Management Practices within SME's:**

In order to boost the effectiveness of the SME's working, the management must provide additional focus on enhancing the Knowledge Management Systems within SME's. The perception of staff linking with organizational functionality of SME's is dependent upon Knowledge Management practices.

Today's SME environment comes with serious fiscal limitations, lack of Managers, Strained staff relations, increase in utilization of quality standards. There are lots of criticisms leveled at SME's like pricing structures, bills and productivity.

In order to survive in the coming years, Transformation of SMEs is absolutely necessary. In contemporary world at least the next generation of methods i.e.; using Big data, Internet of Things, Machine learning and Artificial Intelligence are needed. The following are several of the recommendations made to the supervisors and owners of SME's. If they're applied, the present problems in the SME's may be resolved to a great extent. The key suggestions are:

#### **5.3.1 Work Redesign:**

Work redesign is replacing the particular structure of the tasks of individual's performance. The idea of work redesign is among the most creative answers to the present day disturbed relations among the staff. It calls for redefining the labor and employment parameters of employees in SME's. Presently, there's a requirement of change for structural transformation in all cadres of the workers within SME's.

#### **5.3.2 Quality Circles for Enhancing Tacit Knowledge:**

There's a lot of scope for application of the idea of quality circles in the SME's which is a labor intensive process. A small group of six to eight people who do the related or similar tasks or work related problems belongs can be termed as quality circles. Quality circles idea received the prominence, after it had been used in USA in 1973. The target of these quality circles is enhancing the sharing of tacit and explicit knowledge. It restores the morale of the workers, reduce costs and offer qualitative performance in SMEs.

#### **5.3.3 Providing Recognition and Incentives to People Who Promote Implementation of KM Practices:**

An environment which promotes SMEs to perform, practice and instruct the concepts of quality management, quality goals, and formulation of quality is imperative to enhance performance. The employees are duly recognized with rewards, ideal incentives to inspire them for continuous quality and efficient management practices. Incentives are important for excellence. Threats along with coercion are going to have negative results. So, SMEs should provide identifiable and declared incentives for loyalty, participation, and for contribution to the enhanced market share.

### **5.3.4 Implementation of Business Process Re-Engineering (BPR):**

Business Process Reengineering is a problem solving approach. It emphasizes essential rethinking and major redesign of company process to achieve remarkable changes in vital functionalities such as for example cost, quality, service and speed. Due to financial constraints and scarcity of resources, it has not picked up. Now a few SMEs have begun to consider Business Process Reengineering as something to cope with the growing green requirements on SMEs. Despite increased investment and great interest in reengineering initiatives by SMEs, there needs continuous and systematic analysis of BPR in use in SME's.

### **5.3.5 Managerial Policies, Procedures and Autonomy:**

In SME's the easy operation and flexibility are the basics of simplification of procedures. Simplifying procedure is to be attempted from the systematic recording, critical examination and analysis of existing methods. Methodology should improve not just in specific operations but how you can carry out additionally in processes, systems and procedures. The study can include the evaluation of many interrelated processes along with organizational units, simplification and review of written forms and records. It is crucial to get a complete and clear picture of the sequence involved in the work of steps.

The recruitment of individuals in SME's should be objective based on case wise. Service regulations can be implemented in all personal matters. There shouldn't be any kind of discrimination in the recruitment procedures. Especially in SME's the proprietors as well as Managers of the group must constantly be driven to offer quality of norms/standards. In case a company expects the staff members to improve organizational performance, excellent managerial policies should be used. The objectives of the organization must be clearly communicated with the personnel at various levels. It is the responsibility of the management to find out that all activities of the company takes place based on the rules and regulations of the business.

Employees in SME's should be given freedom to take decisions and be free to discuss problems, so that knowledge will flow from bottom up and top down approach. SME's also needed to provide independence to the staff members for establishing their performance objectives that will assist in delivering quality products.

### **5.3.6 Improving Inter Personal Relationships:**

An association between people working together in the same organization is known as interpersonal relationship. An individual spends roughly 7 to 8 hours at the workplace. It is not easy to do the job basically alone. He needs individuals to speak, interact and exchange different problems at the workplace. Research states productivity increases manifold when people are employed in groups as compared to a person working alone. Therefore in SME's interpersonal relations will positively influence specific attitudes, opinions and organizational outcomes. Interpersonal connection describes a strong link amongst persons possibly working together in similar team or in the same organization. It ensures, Employees should get along nicely for a healthy and positive ambience in the work location.

- There is a particular way of behaving in the workplace. It's crucial to be expert at work. Leg pulling, criticism, backbiting must be stayed away from. Generally there should be co-operation between employees, supervisors and supporting staff in a working group
- Manager's should formulate particular key result areas for all the workers and also ensure task responsibilities don't overlap. Overlapping of Job responsibility causes workers interfering in each other's activities and later on battling over little problems. One should be concerned only with his work rather than trying to find out what the other employee is up to.
- In SME's, passing on right information is required and the information must be provided with one another. Data playing, tampering with information spoil relationships among colleagues and lead to confusion at the workplace which cannot be tolerated is undesirable. Employees must speak with one another properly for a great relationship. Consider, an issue shared is a problem half solved.
- Discussions need to be on an open platform wherein every person has got the liberty to voice his/her views as well as opinions. Written method of communication is one among the highly effective way of communicating in the work location. In a SME, with various departments it's needed and required. Often, the boss and the other people must keep cordial associations with each other in the SME's.
- Team leaders and supervisors must conduct meetings with each other. It's crucial to conduct meetings regularly. The proceedings are reviewed frequently and performance is monitored in SME's. Don't favor any employee because you understand him individually. Favoritism spoils the relations between subordinates and supervisors.
- Individuals must be trained to operate in teams. Work must be equally allocated to staff to expect the best out of them. No worker must be overburdened. Individuals doing work in teams are friendly and adjust with each other better for better performance.

### **5.3.7 Improving Team work for Knowledge Sharing:**

Effective team work in SME's could be disrupted by diverse styles of management. They are gender and status differences, lack of communication and competitive demands on different departments. Encourage quality teamwork by rewarding groups for good performance that is superior and sharing information across departments. Create environment to work nicely as a group, give praise and also issue little rewards in the appreciation of the job managed by the SME's. Team work is improved when employees understand each other and are confident in discussing host of issues. Team work is enhanced when workers know each other and are comfortable in discussing a variety of issues.

Team members should be given distinctive guidelines to improve and enhance performance and avoid creating a culture of blame. They are trained and encouraged with an attitude of being proactive and solution oriented. For example, if one member repeatedly fails, then see the member is guided properly and then the task is fulfilled.

### **5.3.8 Fostering Participative Management:**

In a good organizational climate workers should be granted a chance to participate in the decisions. It is suggested the employees are sought for addressing the employee problems.

The participative management environment, is nurtured by sharing the job related issues confidently.

- The workers must be addressed in a fair manner by the management of SME's. Everyone should be given an equal chance.
- Everybody must be responsible for the actions of theirs rather than blaming others for the mistakes. Employees must be encouraged with decision making.
- During face to face meetings, the management must make sure to find out the outcome is effective and also the management must take note of the opinions expressed by the workers and also try to implement them.

### **5.3.9 Effective Leadership:**

Small and medium enterprises must offer effective leadership to deal with quality challenges. Organisations must create a lifestyle which is supportive of leadership, development as well as chance taking.

They should strive to attract, reward and retain strong leaders while providing mentoring opportunities for new generation of leaders.

A strong leader to ensure that these standards are embodied by each team member.

### **5.3.10 Welfare, Security and Grievance Handling:**

The supervisor must instantly recognize all the grievances and need to take proper measures to eradicate the sources of such grievances, therefore the workers stay dedicated and committed to their work. Effective grievance management is a crucial component of management process.

### **5.3.11 Improving the Training and Development Activities:**

- Training and Development programs are designed to boost the job knowledge and skills of employees at each level. They help to broaden the horizons of human intellect and the general character of the workers. The Training programs are developed in such a way that they will help in the optimum utilization of human resources which further helps the employees to achieve organizational goals as well as their individual goals.
- Effective Training and Development helps building a good feeling and perception about the organization. The workers get these thoughts from leaders, peers as well as subordinates.

### **5.3.12 Improving Physical Facilities and Ambience:**

SME's should offer congenial atmosphere in the job environment for employees. Hygiene factors should be provided with utmost importance.

Other amenities and the Toilets must be looked after properly.



### **5.3.13 Addressing Gender Issues:**

Though, any career isn't gender specific, obviously gender issues develop in the workplaces. SME's aren't exempted. It's recommended that men and women should be treated equally and there should not be any discrimination in the compensation or any other related matter. Generally there shouldn't be some type of sexual harassment and also the male people should extend co-operation to female workers in all matters. The management needs to have excellent gender policies as well as gender committees.

### **5.3.14 Better Pay Structures:**

The management shouldn't show discrimination in the pay of the employees. The wages must be paid out on time. The workers must be provided sufficient information about their pay and compensation. The pay and allowances of the employees receive should be adequate for their normal expenses, should commensurate with adequate duties and experience. They are assured of adequate emoluments to their functions.

Many suggestions came from on this particular job of pay structures, especially for the Textile Industry. Several of the key things or enablers are not considered in Knowledge creation process in textile industries due to the present atmosphere. The management may consider it to follow to enjoy a competitive edge. A couple of suggestions are:

- Identification of knowledge that is critical within the organization and developing a database and environment to talk about it in an effective way.
- Capturing, collecting and managing best practices which could be used/ reused
- Providing channels of communication possibly electronically or socially for knowledge creation or transfer to take place.
- Measure of T shaped skills lacks of problem solving elements. T-shaped skills set enable organizational users to have interaction with each other meaningfully to resolve the issues. Organizational members possessing this particular skill are able to connect their knowledge to connect the problem at hand. Thus, T shaped skills measure should be considered the capability of individual specialist to sustain a synergistic conversation with each other within the problem- solving context.
- Organizational performance measure must be enhanced to obtain much more stable results. Nevertheless, the usage of self-report scales to calculate the analysis variables entails the possibility of the typical way bias for several of the outcomes obtained. Moreover, lots of variables help you to establish organizational performance, and tries to trace causality to the single element like organizational creativity are fraught with peril.

### **5.3.15 Technology Upgradation, Vertical and Horizontal Integration in the Textile Sector:**

Technology Upgradation Fund Scheme (TUFS) is in operation from April 1999. The evaluation of the utilization of the Fund reveals that spinning and composite mill groups nevertheless make up the biggest beneficiaries of the plan. Focus in coming years needs to be directed to segments which haven't received the benefit so far.

Special mention may be made of segments including garment production, weaving, knitting, made up manufacturing, processing of fibers, technical textiles, fabrics, yarn, etc. that require further encouragement for modernization. Man-made fiber textiles are yet another group that is to be included under the scheme. Vertical and horizontal integration of the market will additionally be facilitated by development and modernization of capacities, and establishment of new enterprises engaged especially in high value added processes.

There's necessity for integrating businesses in the market from spinning to garment making to facilitate obtaining big orders from developed countries. Cooperatives as well as business associations are able to facilitate the procedure through linkages among existing devices, and additionally by promoting big sized brand new enterprises having multi stage operations. Nature and scale of skill gap vary across different segments of the industry. Skill gap is far more severe in garment and technical textile sectors. The gap is also found in terms of efficient management systems, for instance, indigenous CAD/CAM skills and efficient enterprise management, including ERP systems. These are capabilities that serve as a key to move up the value chain. Lot more remains to be done to upgrade the capabilities of personnel working in the industry at various levels.

### **5.3.16 Bridging the Skill Gap in Textiles and Clothing Industry:**

As India is one of the leading exporter of textiles and clothing, the market needs to complement their cluster of expertise in manufacturing by acquiring knowledge in the high value added services of the supply chain. For example design, sourcing and list distribution. In order to get these avenues, national vendors have to put better focus on education and training of services related skills, to inspire establishment of joint ventures.

Further household suppliers are able to discuss industry understanding, and provide more integrated solutions to potential buyers. The business is experiencing a significant re orientation towards non-clothing programs of textiles like specialized textiles.

They are developing at two times the speed of textiles for clothes programs, and now account for over 50 % of textile generation. The processes involved in producing technical textiles need skilled employees and costly equipment's. Scale as well as nature of ability gap varies across various segments of the market. Skill gap is far more serious in technical textile sectors and garment. The skill gap is also been discovered in enterprise management. Therefore the technologies such as Computer Aided Design/ Computer Aided Manufacturing skill set, Enterprise resource planning skill set are required. These are the capabilities that serve as a key to move up the value chain.

### **5.3.17 Brand Promotion and Eco-Labeling:**

Brand Promotion is a crucial stage for market penetration. Acquisition of manufacturers by Indian companies is another strategy for promoting exports. Ecolabelling is emerging as the demand for worldwide competitiveness of Textiles and Clothing business. With the help of third party accreditation or certification, businesses have to adhere to comply with the green requirements, quality standards, and interpersonal criteria. Indian Textile and Clothing industry usually requires government support to go in this specific direction.

### **5.3.18 Encouraging Foreign Direct Investment (FDI):**

FDI helps in technical advancement capacity of expansion, and generates the latest technical knowledge. The need for FDI are required in current manufacturing methods and procedures, managerial expertise, newest advertising strategies, latest dress designs etc. FDI inflow to this field up to now is extremely small. Specific efforts have to be made to help the situation. Special Economic Zones and Integrated Textile Parks are essential programs inviting FDI for technical advancement and improvement of incorporated procedures.

### **5.4 Suggestions for Future Research:**

- a. The current study evaluates the Knowledge management in Textile Industry of the Guntur District. A comparative study including far more districts might be undertaken.
- b. The analysis can be further given to the other Knowledge intensive sectors (services) in India. This will comprehend the knowledge management role of these sectors and areas of development for the same.
- c. In depth focused studies on knowledge management practices carried out at organizational level can be great source of learning for top management of various companies.

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