SHAH HUSSAIN

VALUE CREATION POTENTIAL THROUGH EFFECTIVE INFORMATION AND KNOWLEDGE EXCHANGE BETWEEN MANUFACTURING FIRMS AND CUSTOMERS

Master of Science Thesis

Prof. Nina Helander and M.Sc Hannele Värynen have been appointed as the examiner at the Council Meeting of the Faculty of Business and Technology Management on June 2017.
ABSTRACT

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Manufacturing firms are continuously striving to stay competitive by creating value for their customers. As the time is changing, needs of customers are also changing and it is need of the hour to gather information about that. Therefore, it is essential for organizations to interact closely with customers in order to obtain information of their preferences and then develop it into knowledge that can be further use to create value for both parties.

The thesis was conducted to examine the working and information channel of 'The Showroom', a new service developed by case company to interact closely with their customers in order to provide better products. The goal of this research was to identify issues related to working and information channel of new developed service and then develop a framework in an effort to create value through information exchange channel between the customers and this service.

The research was constructed in sensible and mixed method approach by mainly utilizing semi-structured quality interviews and already developed research work regarding value creation through knowledge intensive services. With the help of interviews, initial situation of the service 'The Showroom' was clear, which indicated issues like noise in the information channel, sample manufacturing, lead time and customer satisfaction. The final version of framework not only tackles the issues but also provides systematic approach to run new service business to create value through effective knowledge exchange in product development.
PREFACE

This thesis represents the framework of value creation cycle for new product development in knowledge intensive service business. Knowledge of customer preferences and taste surely helps companies to generate products according to their need, which ultimately creates value for both customers and companies. The research was conducted by analyzing new developed service, namely ‘The Showroom’ case, from a case company which deals in packaging products in Finland.

The process of ending this thesis was not easy as it has many ups and downs through out its way and the actual time to write and finalize this thesis was very challenging. However, the process reached its end with the support from key persons, whom I would like to acknowledge here.

First of all, I am really grateful to God for providing me with such opportunity. I would like to especially acknowledge my mentors here, Professor Nina Helander and MSc. Hannele Värynen, who not only guided me effectively, but also provided me with great advices and were flexible through out this journey. Without their supervision and support it was impossible for me to do this work. It was an amazing experience to work under your supervision.

Special thanks to my parents who always motivated and supported me during this entire journey and my siblings who always prayed for my success. I cannot forget my friends without whom this could not be possible. I really appreciate your help especially Amad, Naima, Yusra and Ahsan.

Tampere 14.10.2017

Shah Hussain
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<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>KA</td>
<td>Knowledge application</td>
</tr>
<tr>
<td>IKM</td>
<td>Information and knowledge management</td>
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<tr>
<td>CSC</td>
<td>Customer service centre</td>
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<tr>
<td>KCE</td>
<td>Knowledge of customer expectations</td>
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<td>CSM</td>
<td>Customer satisfaction measurement</td>
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<td>CVD</td>
<td>Customer value determination</td>
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<td>KMS</td>
<td>Knowledge management system</td>
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<td>ACAP</td>
<td>Absorptive capacity</td>
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<td>KBS</td>
<td>Knowledge based systems</td>
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<tr>
<td>PSF</td>
<td>Professional firms of services</td>
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<td>VCP</td>
<td>Value creation process</td>
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<tr>
<td>CoP</td>
<td>Community of practice</td>
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<td>TAM</td>
<td>Technical adoption model</td>
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<td>KIBS</td>
<td>Knowledge intensive business services</td>
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1 INTRODUCTION

1.1 BACKGROUND

With fast progress of industrial advancement and severe competitions among the manufacturing firms, both globally and locally, has certainly made value-creation, within an organization, an important factor for success. To maintain a competitive edge managers seek value creation as a beneficiary tool in continuously changing environment and emerging industrial developments. Therefore, how an organization creates and measure its value will be an essential factor for the future progress and success. However, the factors that can affect the value for organization can be unstable because they are multifaceted. It is very important to find an effective method or model to assess the value. Value management has gained importance in recent years, and many of the industries focus only on the solution and assessing model, but disregard the co-relation among the different levels of an organization, due to which failed to get the best optional model (Chung et.al, 2013).

Organizations work remarkably and create value when strategies implied by them respond directly with market opportunities by taking advantage of their internal and external resources (Marr B, 2004). Therefore, it is important for managers to realize their main resources and key drivers of value and performance in their organizations. Usually resources can either be tangible such as land, machines or financial capital or intangible such as customer or supplier relationship. In recent years, the era of intellectual capital has begun and recognized as drive for the organization performance and value creation (Marr B, 2004). The notion of performance drivers proposes informal relation between organization value creation and its resources. Penrose states that resources solely never create value, but the services that can render by resources (Penrose, 1959 p. p.25).

Customer needs are always changing with time and the technology which used to satisfy those needs, also evolves itself as a substitute (Fisher and Pry, 1971).
Companies have to keep up with the every changing environment, otherwise their future will be vulnerable if they fail to be innovative in their product line and will also fall to their close competitors (Hartley, 2010). Therefore, in order to survive and gain competitive edge, it is important for organizations to analyze the market and predict drivers that create value for their customers. (Lichtenthal et al., 1997). According to Munksgaard and Freytag (2011), innovative products and their development is the reason why companies access to new markets and how they open up new opportunities for the companies.

Organizational performance can profoundly related as knowledge based issue. Information and knowledge management (IKM) literature plays key role in observing and discussing the role of knowledge in any organization. Information management emphasizes on intangible resources that can take part in value creation distinctively in form of structural human and relational capital assets kept by an organization while knowledge management focus on knowledge related activities and processes in any organization. KM literature deals with the mechanisms that can be used to control and manage these resources (Kianto A, 2014). By understanding the interaction between these aspects one can simply get the greater picture of how knowledge based value has created in firms over the years.

1.2 Research Background

Manufacturing companies retain their spot and keep their competitive advantage within the markets through constant development of their products according to customer preferences and developing tastes. Different procedures are considered by manufacturing companies to increase the efficiency in product modification. It mainly contains the idea of propagation, design and launch of improved products and services in the market (Ulrich and Eppinger, 1995). It also includes feedback from consumers and their product use. This all information is then converted into tangent knowledge, which is then used widely in manufacturing better and more efficient products. (Adner and Kapoor, 2010).

In practical approach, this research focuses on managerial issues related to the new service, known as “Showroom”, launched by case company. Case company is a large
firm dealing in different packaging products and has customers all over the Finland. Company has recently launched a service namely “The Showroom” in an effort to interact with customer more closely and improve their products efficiently. As the case company is a packaging firm, which means that manufacturing products needed to be developed according to the ever changing taste of their customers. In this effort new service has been developed in order to stay knowledgeable with customers’ requirements and needs. In short, organization is striving to understand how this new service will advance and construct with the field of knowledge-intensive business.

The research works towards a possible solution to the managerial problems and point out main actions which can make new services more fruitful and successive. Most of the research generally study the concept of new service development (e.g. Alam & Perry 2002, p. 515; Bullinger et al. 2003, p. 276; Menor et al. 2002, p. 136; Stevens & Dimitriadis 2005, p. 175), whereas this research looks through it as a knowledge intensive business service in order to create value. This will bring the better awareness to the know how of knowledge intensive business service and how should they advance themselves and what are the elements of advancement in the matter, aiding organizations to succeed and survive in such tough environment of competitors.

### 1.3 Objective of the Study

Companies’ businesses are usually in the interest of their customers, because buyers put their money in such products which satisfy their needs. Value creation is process adding value to firms’ business either by satisfying needs of customer or by altering the products in such manner that provide them with competitive edge in the market. Hence, companies’ potential to analyze and create value through customer’s perspective, will be more effective tool to influence the demand and sale of their products. Thus, companies that provide high value to their consumers by pursuing innovations in their system. Value creation is usually made up of many interconnected actions and can be manage through many different ways (Herrala, 2011). However, this thesis focuses mainly on elements such as customers and information & knowledge sharing between firms and customers. The aim of this research is to understand how knowledge exchange between customers and manufacturing firms can
create value for their customers while developing their new services, what value creation is and how value-creating cycle helps manufacturing firms to operate effectively and efficiently. However, the main objective is

_to create a framework that would assist to identify and also help to analyze the underlying value creation potential through effective information and knowledge exchange between manufacturing firms and customers._

The intent of this thesis is to develop an empirical framework that would propose the value creation philosophy and unveil the key paths to provide value to customers and manufacturing firms. The sub-objective is to answers the following query through empirical research analysis:

- How manufacturing firms understand new service development from knowledge point of view?
- What are the managerial problems and key activities that manufacturing face in an effort to develop fruitful and innovative services with respect to knowledge intensiveness?

### 1.4 Scope and Limitations

This research scope is to propose and deliver reasonable goals of case company. This comprises of a showroom that company has opened for its customers in order to select design of their choice and then they can customize it according to their taste. The issues that keep coming forward with the sample manufacturing were insufficient and not effective information sharing among departments that causes delay in sample manufacturing. The goal is to create value through efficient information and knowledge sharing among both customers and case company.

Value creation can be measure by satisfaction level of customers who perceived this created value. Value creation is not specifically examined by case company. Therefore, relevant value creation will be determined mostly by literature and
developed framework through this research. Due to the limited source access to the suppliers of company, this thesis does not cover the details that are not directly controlled by case company and hence it is out of the scope.

However, this thesis will thoroughly examine the subject of value creation to customers, especially approaches that involve active knowledge exchange in order to give added value to both manufacturing firms and customers. This is done by examining the approach logically, which is applicable with the company’s business and of utility to enhance company’s productivity from case company perspective.

The fact that, this research is service specific and not a path which covers the subject in generalize way, has put limitation to it. Therefore, the framework formed by this thesis has limitations because of evaluating several processes based on few experts reviews rather than comprising on robust systematic review of all possible approaches and processes. This is the reason why theoretical part of the thesis is merely a brief introduction of all the approaches that will finally form a systematic framework for case company. The case specific approach adapted by this research is formed from systematic empirical approach and not by theoretical approach.

1.5 Research Philosophy, Strategy & Methods

Amaratunga et al. (2002) argues that research represents the methodological and systematic way of investigating problem and then provide a solution to contribute in the existing knowledge. According to Minor et al. (1994), who states that research can either be done theoretical approach or by empirical approach. Theoretical research mainly focus on existing material and theories that are already in use to solve the research main problem or to make new theoretical framework. Whereas, empirical method relies on gathering and analyzing data and presents the final verdict in terms of tangit result. It comprises of several steps first of which is to define the problem or the basis of research. Next step includes developing the theoretical framework by literature review and later by testing the theoretical framework in real life cases. Final step represents the finding and conclusions and discuss the results in a broad manner. (Simon et al., 1996)
Generally in the business and management area, data is being gathered and transformed into refine information for company for the purpose of decision making. Data which is collected directly related to research problem is known as primary data, whereas data which is collected by company reports, publications and academic papers, is known as secondary data (Buglear, 2005).

Walliman (2005) states the daily information we gather without any reason or define purpose and termed it as ‘research‘ is basically not a ‘research‘. As a part of it, he marks the significance of the term used wrongly (Walliman, 2005):

• Collecting data or facts with no clear objective.
• Rearranging the data or information without thoroughly interpreting it.
• In order to get respect and become noticeable in terms of your product.

Which makes us to ponder is that research is only about collecting of data and the refine information out of it, in fact it is more than just reading articles, books or interviewing people to ask questions. Even though collecting data is a part of research, but if that is not scrutinizing under systematic way or has done with no clear objective, it cannot be consider as research. Finally, there is no harm to say that the term ‘research‘ can be utilized the confidence of people in particular idea or product. Based upon the discussion above, we can say that research must have these characteristics (Saunders, 2009):

• Systematic collection of data.
• Systematic interpretation of data.
• A well-defined purpose to figure out things.

Therefore, research may define as a way to figure out things in systematic way that it became understandable for the people with enhancement in their existing knowledge. ‘Systematic‘ and ‘figure out things‘ are the two phrases that highlights that research is purely relies on relationships that make sense and not just on beliefs (Ghauri, 2005). There is no harm to say that business and management research involves systematic
approach in an effort to find out things from the early discussion. Easterby-Smith et al. (2008) believe that four elements collectively compose business and management research distinctive (al, 2008):

1. An effective approach, in which researchers and managers extract knowledge provided by other disciplines.

2. The fact that, managers are busy people around organization, therefore it is highly unlikely to pursue research unless they see potential advantage.

3. The reality that managers and researchers are well educated: many out of them are graduated or post-graduated.

4. It is essential for research to be useful in practical life. It means that it either must have a potential to take some action or need to look after the practical outcomes from the findings that must look after.

The nature of management requires to meet both challenges of being methodological and theoretical rigorous, but at the same time it should embrace practicality (Hodgkinson et al., 2001). Gibbons et al. (1994) further discussed this, in creating knowledge and, specifically, the notion of Mode 1 and Mode 2 knowledge. In Mode 1, knowledge gain encourages researchers to solve question from an academic approach, where there is little utilization of research in practical world. On the other hand, Mode 2 comprises of research carried out by the practitioners, emphasizing the significance of alliance of both with and in between practitioners (Starkey, 2001) and the obligation to create knowledge that should be practically applicable. According to this, Madan and Starkey (2001) notice that the research which has been conducted within the Mode 2 method, act as a bridge to provide way for attaining side of knowledge represented by universities together with the demand side represented by businesses in order to overcome the double hurdle.

One must understand the way that there are a considerable measure of decisions to be made with respect to explore procedure, look into theory and research strategies and
techniques. These decisions are identified with ideas that are normally interconnected, subjective and communicative troublesome, hence it is basic to fabricate an exhaustive views that govern these ideas (Saunders et al. 2009, pp. 107-108).

Researchers Saunders et al. (2009, p. 108) forgot an imperative idea that is hermeneutics. In accordance with Von Wright (1970, pp. 2-3) who contends that the majority of key, methodological & specialized decisions are gotten from fundamental and philosophical inquiry, that is either to select a positivistic or a hermeneutic approach. The term positivistic endeavors to locate a target that seeks truth for the given issue, though a hermeneutic approach intends to comprehend and investigate the issue, deciphering and socially developing a subjective arrangement (Olkkonen 1994, p. 38). Moreover, hermeneutics primarily is the light of vision, while positivism is grounded on authenticity and subsequently very identified with objectivism (Olkkonen 1994, pp. 26–27). Provided the examination foundation, the exploration queries and its business nature, a hermeneutic approach appears to be more fitting, yet idea merits deeper consideration now.

Figure 1. Key concepts and their relations (adapted from Saunders et al. 2009).
It is contended that interpretative is deliberately very fitting to investigate business (Saunders et al. 2009, p. 116). Interpretative is just another option examine in postivist manner, expanding on the thought of hermeneutics (Bell and Bryman 2007, p. 19). The process of Interpretativism proposes that actualities must be reproduced in the light of translation, contending that information isn't separable from hypothesis (Baskerville and Myers 2009, p. 40). Besides, interpretativism constantly presented as unlimited decisions and selections made amid the exploration procedure, which is particularly valid in business examines (Gummesson 2003, p. 483). As suggested before that the essence of business thinks about is established in a social setting and since interpretativism encourages the scientist to comprehend this social part of a characterized issue and to enter the novel, complex circumstances that are available in associations, it is a decent key decision for business examine (Saunders et al. 2009, p. 116). These mind boggling and novel circumstances are gotten from the belief system that individuals and their organizations are generally unique in relation to the universe of common sciences, suggesting that interpretativism, with a hermeneutic philosophical foundation, is in fact profoundly proper for this examination too (Bryman and Bell 2007, p. 17). In the light of Saunders et al. (2009, p. 108) and proceeding from the epistemological and philosophical problems to a more vital setting, the following section will survey the issue of research methodology and approach.

At one side of the continuum, a research has taken out to understand the processes of business and management and their results. Usually such research carried out largely in universities with an academic agenda. Its main consumer can be academic community or the relative companies involved in the process in order to find out some practical implications. This often regarded as fundamental, basic or pure research. The other end comprises of direct and immediate relation with managers that addresses the issues that they see have potential to address and tries to present them in a way that they can be understandable or act-upon. This is termed as applied research.

Strategies related to empirical research can be classified in to four type such as: survey, case study, experiment and post-mortem (Wohlin et al., 2006). Qualitative and quantitative research methods are traditionally used. Soft facts such as experiences,
impressions, attitudes and interpretations are directly relate to qualitative methods and traditionally utilized by social sciences. Numeric information such as measurements and quantifications are hold in quantitative methods. According to Gummeson (1993), complex phenomena can better be understandable by case study research. The reason behind the management research is that it should be conduct in such a way that it can support the actual business environment and companies can seek benefits through it.

**Research methods used:**

The important decision in this thesis research was the choice of data generation methods. These are the main methods for generation empirical data:

1. Use of existing materials
2. Survey
3. Qualitative interviews

Existing material consists of data and literature that is readily available. Quantitative surveys used to transform respondent's attitudes, tastes and opinions into numbers, which gives this method a scientific flair. Qualitative interviews are one of the most common methods to gather data and help to generate tacit knowledge. Observation can describe as noticing things around us attentively. Data from different existing materials took into account within early stages of research to provide better understanding of the context. The studied subject related to people’s experiences, feelings and attitudes.

Existing material, for the most part considered as optional information, and it incorporates information and gathers data from articles, books, productions, papers and reports. Researcher gets ready inquiries for respondents to examine the issue under study. It contains open-end questions that have asked amid the meeting stream. Perceptions, answers and reactions were recorded, portrayals or recordings to know the motions and non-verbal communication amid meeting. Four, observations are utilized by the analysts for data gathering by specifically watching the subject case. Literature review characterized as the precise and systematic location, assessment and synthesis of evidence and proof with a specific end goal to build up realities and reach to
conclusions and results about past occasions and occurrences (Borg (1963). It is a demonstration of remaking done in order to do critical, rational and logical inquiry designed to reach to unwavering portrayal of the past age. In looking for information from the individual encounters and perceptions (observations) of others, from archives and records, scientists regularly need to contend with deficient data so that their recreations have a tendency to be outlines as opposed to representations or portraits.

The possibility of examining numerical information sends shudders down the spines of numerous learner scientists who shrug off the prospect of measurements as well as hold basic complaints to what they see as 'the mathematisation of nature' (Horkheimer 1972). Most ideas in education, some will affirm, are not reducible to numerical examination. Statistics, they will protest, join refinement of process with crudity of idea. We do not hold with any of this. Quantitative data analysis has no more noteworthy or lesser significance than subjective investigation. Its utilization is completely subject to wellness for reason. Discretionary expulsion of numerical data analysis is negligible ideology or bias.

Setting up and leading the interview will make up the following stage in the process. Where questioners are starting the analysis themselves, they will unmistakably choose their own particular respondents; where another specialist keeps interviewers busy; at that point, they will most likely to be given a list of selected individuals to contact. Tuckman (1972) has briefly assessed the methodology to embrace at the interview itself. He says that the interviewer ought to brief the member of the nature or reason for the meeting, being straightforward yet without creating risks for biasing reactions, and should strive to comfort the member. Series of interviews have been conducted during this thesis gave quality information with respect to research question that is being addressed. Conducted interviews were clarified (what happens, and how, and the structure and organization of the interview), how reactions were recorded (and to look for authorization if this is to happen), and these methods ought to be noted and monitored all through. While conducting the interviews, the predispositions and values of the questioner not revealed, and the meetings were manage without being judgmental.
Empirical part of thesis mainly comprises of the existing material, interviews and observation. The existing material part gathered from the databases with wide variety of articles, journals and previous researches. TUT digital library was the main source of gathering that data and other sources includes articles from Science direct, JSTOR, Emarald Insight, Scopus and google scholar. TUT digital library provided direct data from previous working on ‘Value Creation‘ and strictly focus on business management articles. Although the database was too large that it overlapped sometime and was difficult to find the exact right material related to research, but in the it covers the research field quite nicely.

Survey also carried out in support of the interviews, but due to lack of participants and their answers, the statistical importance of the survey was not valid. Therefore, it was not used in this thesis. Although, the aim of the survey was not to collect satisistical evidence for research, but to provide the overall picture of current situation within the case company. The conducted series of interviews not only provide the significant amount of empirical data, but also provided enough insight to identify the areas of improvement. On the other hand, interviews that were conducted during this thesis timeframe were very few and this is the reason why this thesis has limitation. Additional interviews could have added more value to this research and present more comprhensive approach of value creation cycle.

Audio recorder was used to record the interviews and documented in later phase and then thoroughly examined. Only few phases of interviews are mentioned in thesis that are helpful in identifying the systematic path to develop this framework for case company because of the relevancy and confidentiality. The material collected also include the concepts and ideas that are beyond the scope of this thesis, which means that this thesis can also be use for other functions of case company business such as customer care, marketing e.t.c.
Timeframe of the interviews can be seen in the table below

**Table 1. Timeline of conducted interviews**

<table>
<thead>
<tr>
<th>Date</th>
<th>Interview</th>
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<tbody>
<tr>
<td>27 October, 2016</td>
<td>1st interview: Describing the situation of new service such as ‘Showroom’, discuss the aim of the research.</td>
</tr>
<tr>
<td>15 November, 2016</td>
<td>2nd interview: Deeper analysis of the problems and more discussion about the information and communication channel.</td>
</tr>
<tr>
<td>6 December, 2016</td>
<td>3rd interview: Decided the solution path and more clear about goals.</td>
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</table>

It is important to keep this in one's mind the way that the meeting is a social, relational experience, not simply a data gathering exercise. To be sure, Kvale (1996) recommends that an interview take after an unwritten script for interactions, the standards for which just surface when they are beyond limits. Subsequently the interviewer must be making careful effort to lead the meeting precisely and delicately. Kvale (1996) includes that, as the scientist himself is the research instrument, the effective and efficient interviewer is educated about the topic as well as a specialist in communication and correspondence. The interviewer should build up a suitable climate with the end goal that the member can feel secure to talk openly without any hesitance and shyness. This works at a few levels.

**1.6 Research Progression and Structure of Thesis**

Research progression and structure of thesis can be seen in the figure below. Used research methods in each phase are also stated:
This research is the continuation of the studies carried out in different time spans. Initial report regarding value creation research and its aim was first submitted in August. The empirical research process started in September, 2016 in which first qualitative interview and observation in the case company was conducted. Second interview was then conducted in October, 2016 in order to have better understanding of problem case company facing and what are the areas to improve. The third interview was conducted in December, 2016 in which solution of problem were agreed by both sides. After the series of conducted, thesis writing process was started in February, 2017. Theoretical framework and development process according to different concepts and was discussed with thesis supervisor in the respective months of April and June, 2017.

In the second chapter of the thesis comprises of the background context of value creation is thoroughly explained with respect to customer perspective and knowledge management. The third chapter briefly describe about customer value and their expectations from product and service. Fourth chapter consists of information and knowledge management system within an organization and how vital it can be proved
to satisfy customer and create value for manufacturing firms. Empirical part of thesis is presented in chapter 5, which comprises of framework that has been developed from all the elements combined in previous chapters. In the 6th chapter concludes the research work and critical evaluate the result of this thesis.
2 THEORETICAL BACKGROUND OF VALUE CREATION AND VALUE NETWORK

2.1 Value Creation

There are plenty of theories that explain and argue about the existence and purpose of firms. For example, Resource Based View works on an assumption that strategic resources are distributed diversely across the firms, which means that only those firms will have competitive advantage that are unique in their capabilities and have resources that can develop value (Barney, 1991). That is why services or products executed by these unique bundle of capabilities and resources create value (Amit, 2001).

The transaction cost theory suggests that firms create value by minimizing cost and maximizing efficiency in the production line. At the core of the theory, there is the selection of the most effective governance form given a transaction that is embedded in a specific economic context - internalisation (Amit, 2001). According to theory, firms create value by optimizing the transaction costs in such a way that it offers least cost with maximum efficiency in product delivery. Thus, firms that economize on transaction costs could be expected to attract more value from transactions (Amit, 2001) to create value.

On contrary, (Slater, 1997), accomplice with (Woodruff, 1997) argument for firms to make and adapt better customer value strategies and believe that main focus of businesses should be on the activities that provide customer value. According to them, firms do not exist just only to maximize profit or reduce cost, but rather they exist to provide service and goods to their consumer to satisfy their needs. So, firms create value by providing better products and services which lead to customer satisfaction. Other scholars also describe value creation according to their perception which can be seen in the table below:
Table 2. Definition of Value creation.

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Value creation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Groth, J. C., Byers, S. S. and Bogert, J. D., 1996)</td>
<td>“Ensuring customer satisfaction in the market for products and receiving attractive economic returns from customers”.</td>
</tr>
<tr>
<td>(Anderson and Narus, 1999)</td>
<td>“Regard value as the cornerstone of business market management because of the predominant role that functionality or performance plays in business markets.”</td>
</tr>
<tr>
<td>Allee (1999, 2000)</td>
<td>“Value is created through complex dynamic exchanges between one or more enterprises, its customers, suppliers, strategic partners, and the community”.</td>
</tr>
<tr>
<td>(Bowman, C. and Ambrosini, V., 2000)</td>
<td>“Firms ability to provide solutions to the customers needs while maintaining or improving its profit margin”.</td>
</tr>
<tr>
<td>(Simon, D. G., Hill, M. A., and Ireland, R. D., 2007)</td>
<td>“When sales are achieved and customers view that the product confers more consumer surplus better than competing alternatives”.</td>
</tr>
<tr>
<td>(Lepak, D. P., Smith, K. G. and Taylor, M. S., 2007)</td>
<td>“Firms ability to translate subjective value of the customers into customers willingness to exchange monetary amount for the value received”.</td>
</tr>
<tr>
<td>(O’Cass, A. and Ngo, L. V, 2010)</td>
<td>“Firms ability to respond to the values customers are looking for at the point of proposition. The value customers are looking for include superior performance, price, relationship and co-creation”.</td>
</tr>
<tr>
<td>(Bhatti, W. A., Khan, M. O., Ahmad, A., Hussain, N., and Rehman, K, 2011)</td>
<td>“The creation of lower cost of products compare to competitive alternatives”.</td>
</tr>
</tbody>
</table>
Customers can be regarded as the main source of gaining competitive edge as they not only bring revenue, but companies can also get ideas that evolve their products, technologies, and/or market access, etc. from their customers. For example in the case of Toyota automobiles, they have outsourced their number of parts to GM motors due to which they not only save their time but also negotiate to generate enough profit. Thus creating value for them. In similar way GM motors create value for themselves as they are key partners for them. The main objective for supplier’s and customer’s firm, getting into partnership, is to create value for each other. Both parties gain something out of it. From the previous empirical results, it is clear that firms that focus on few chosen customers gain more profit in longer term than those who transactionally approach greater number of customers. This thesis comprises of supplier perspective because major manufacturing firms success can be attained through their good relationship with customers. It is a two way road where supplier and customers both receive benefits from each other at same time. However, it is crucial for suppliers firms to understand the concept of value creation through this partnership in order to survive in the market.

Value chain can be affected by four main factors such as: customer value, core competences, relationships and interaction (e.g. Håkansson and Johanson 1992, Parolini 1999, Kothandaraman and Wilson 2001, Helander 2004, Möller et al. 2005). The organizations should be able to capture their target customers and markets by the maximum utilization of their core competencies and core capabilities by offering products and services at a rather competitive prices in comparison to their rivals. Making close associations and relationships, organizations can focus on their core competencies and outsource non-core procedures. Delivery process will become more swift by such such step and maximized the created value. Moreover, partnerships don't survive without close collaboration between specific actors. Those actors trade money, information, assets and material with each other. Thus, upholds and encourage the system of value creation between partners. These four main blocks are discussed thoroughly and their interrelation is presented in Figure 3.
According Porter (1985) characterizes value as the "sum purchasers will pay for what firm gives them". In this way value allocated in aggressive terms by added up to income, which can be figured by increasing the cost of the item by the amount of the item sold. Parolini (1999) reprimands Porter's meaning of significant worth since it sounds practically like as though the net an incentive for clients were not a value itself. Parolini gets the net value by including the aggregate value buyers need to pay for completing quality making exercises over the aggregate cost, to the value clients ascribe to an item over the real cost of the item. The net value for client is gotten from mix of tangible (e.g. quality, solidness, and usefulness) and intangible (e.g. esteem) components, administrations and financial components (e.g. price tag, installment strategy, guarantees). Rather, Kothandraman and Wilson (2001) consider net value to be the connection between the contending market offerings and their separate costs from the eyes of the client.

This displays a fascinating difficulty in general society field, as back services or those responsible, normally take a gander at cost as the sole deciding variable and not the esteem included administrations or funds. Allee (1999) considers value as both tangible and intangible quality, benefits, knowledge or service that is aiding the goal of the beneficiary will pay for or trade it to another 'profitable thing (Allee 2000). According to Normann and Ramírez (1994) who recognize other values that are not
purely monetary by involving customers in activities in order to create value. The other values can include for example psychological, moral, social and aesthetic benefits. Normann and Ramírez also emphasize the foremost aim which is to bring value to the customers. Overall, the value is created by the customer in its mind and that can’t be measured accurately and is subjective. Customer is the most important determinant when deciding what kind of value creating activities should be done by the system. (Helander 2004) As the public sector has a large number of customers and different point of view about value, conflicts arise when making decisions. So many customers to be satisfied and so many values to be considered make public service sector the most challenging. No comprehensive method exist to measure the value that customers receive. Though by knowing how much customers are willing to pay, estimation of value can be determined. perceived value can be estimated. Helander (2004) sees “value as a difference between customer’s monetary and non-monetary benefits and expenses”.

**Core capabilities and core competencies** (C&C) are the reason why firms are operating. They are the tools through which we can achieve customer satisfaction and delivering high value to them. They should be aligned with both customers’ needs and value creating network. There are likewise aptitudes and learning further within the organization to support these exercises, however in spite of the fact that these components are similarly critical as C&C, in this research it is sufficient to consider the all the more common ideas. C&C are considered as interchangeable terms, but they are different. Core capabilities are an arrangement of center convictions that signify their method for working together. (Kothandaraman and Wilson 2001, Hamel and Prahalad 1994).

Core competencies can be found through work association, correspondence, inclusion and profound duty crosswise over hierarchical limits with the goal that value can be conveyed to the client (Prahalad and Hamel 1990). Hamel and Prahalad (1994) and Kaplinsky and Morris (2001) accentuate that organizations should think just to those capabilities that are generally one of a kind, offer some incentive to client or potentially are hard to duplicate and outsource rest. Helander (2004) recommended that organizations must distinguish their best imperative undertakings to perform, and
comprehend why they ought to be performed. Organizations ought to have an idea inorder to change the course of present framework to alluring heading if necessary (Helander 2004).

**Relationship:** One should, however see that groups' specialized systems don't generally have openings or decisions to change their center fitness. They can, be that as it may, focus on their center capabilities and outsource non-center exercises to isolate suppliers. Outsourcing the maintainence to competitive service provider can be a good example of it. It is imperative to take note of that outsourcing has brought about blended outcomes and can be obtained in various ways. Be that as it may, when it has been connected effectively the outcomes regularly have been advantageous, yet not in all cases.

Organizations can't operate if some of the absolute conditions are not conformed. Organizations need imparted insights about the value that they are to make together, be persuaded that they require each other to make that esteem and to concede to how the made esteem is isolated between the gatherings. On the off chance that these conditions are not met, associations can't generally confer themselves to seek after a typical target and will keep on operating as free elements (Parolini 1999).

Lifetime of ideas now a days is very low due to the severe competitions and organizations are in constant challenge to develop their capabilities and resources accordingly and effectively. Particularly, organization should analyze, anticipate and capture the expectations of market and then transform it into value bundle that is deliverable in the form of products or services with the help of relational advantage (O"Cass, A. and Ngo, L. V, 2010). Therefore, value creation can be describe as a process in which organizations integrate, anticipate and gather its resources and act best of their capabilities to make product offerings that would meet or exceed expectations of customers in order to generate better economic returns.
2.2 Value Creation & Knowledge of Customer Expectations (KCE)

Studies have however been completed on how firms make and make an interpretation of learning into creative capacities that empower them contend effectively in the worldwide market (Cohen and Levinthal, 1990; Grant, 1996; Teece, 1998; Nonaka, 1994; Nonaka and Takeuchi, 1995; Lee and Lee, 2007). The accord that a firm is an exemplification of learning is established on the ground that each movement that is included in the formation of significant worth in the firm is information subordinate, and the essential part of the organizations is the use of learning into the creation of items. (Nelson and Winter, 1982), for instance, in their developmental hypothesis of financial change, opined that the capacity of firms to make predominant execution is an element of the cooperation of the express and inferred assortments of learning with monetary substances and after that put away in the schedules accessible to future era of representatives. The organizations coordinate the unequivocal and inferred information with its non specific materials and culture to make predominant execution in its item offerings. The absorptive limit hypothesis by Cohen and Levinthal (1990) additionally opined that the firms” esteem creation is a component of its capacity to use earlier information to catch new ones, absorb it and apply it to make inventive items.

The essential part of firms is the joining of the master information dwelling in people through the creation, procurement, stockpiling and arrangement of learning in the change of contributions to yield (Grant, 1996). These exercises as indicated by Grant are upheld by the current firms” inventive patterns far and wide. In this manner learning turns into the most critical and most complex methods for esteem creation. Furthermore, esteem creation lies in the firm”s abilities to change this learning into imaginative item offerings. Additionally, in belligerence for the information making firms, Nonaka and Takeuchi (1995) and Nonaka and Konno (1998) built up the SECI show - Socialization, Externalization, Combination, and Internalization. Characteristic in the will be the dynamic and imaginative process by which both the implied and express information are catches, incorporated, traded and changed into firms” focused capacities (item offerings of prevalent execution).
The model approach was seen in the creative procedure of Japanese firms like Toshiba and Sharp venture groups. In a similar vein, the investigation of 431 United States and European firms on what firms do with information, Ruggle (1998) found that tasks in progress in these organizations include catching, getting to and exchanging learning that can prompt expanded proficiency, as learning era and application is basic to development of the organizations. Contending successfully in the worldwide markets, firms should be able to utilize the early learning in order to perceive new data, absorb it, and then use it to create new information and capabilities (Lee and Lee, 2007) as firms’ execution is emphatically identified with the procedure of how firms create, get to, encourage, speak to, utilize, and exchange information inside it. Figure beneath will speak to the model for managing esteem creation through KCE.

![Figure 4. Sustaining value creation through KCE (Hamzat et al., 2013).](image)

The model (Figure 4) outlines "supporting worth creation through KCE". The idea of maintaining quality creation is not new and can be seen from assorted points of view. Esteem creation through the information of client desires lives in the capacity of firms to constantly suspect, incorporate and arrange KCE to make item offerings that meet or surpass client desires superior to contending options.
2.3 Value Creation From Manufacturing Point of View

According to (Brown et al., “Beyond products”, 2009.), improved customer relationship happened to be the best value that one can achieve. Service activities considered as separate entity from rest of the best and this is the reason why the studies were success. Guiding firms to maintain their services as part of their businesses will aid the organizations to generate a new and better way to adapt more effective to generate revenues and to find ways for growth. Targeting only on discrete activities does not provide solution to the primary problem that could be faced by many manufacturers in their product line due to their tradition way of approaching product, business logic and product-centric performance (Helle P., 2010). Therefore, it is necessary to find a new logic to deal whole business as an integrated business in order to make it potentially more competitive.

In practical world, carrying out service logic in real would mean that all the processes carried out by supplier, relevant to its customer, are associated with customer’s activities in order to shape it into one integrated streamline of action with the objective to help customer activities and eventually the business development (Helle P., 2010). An example this integrated system could be of logistic service where all the activities like order making, order processing, delivery and warehousing are all combine under one roof with the aim to aid customer business processes.

Resource dependence theory argues that organizations are not capable of making complicated products or offering right services by themselves that could create customer value. It is very true especially in this rigorous business environment. Therefore, it is very necessary for companies to make a continuous effort to build an inter-organizational ties and relationships in order to achieve the required capabilities and resources. Associating these capabilities and resources to the organization and utilizing these inter-organizational packs of resources and capabilities help to attain competitiveness (Pfeffer and Nowak, 1976; Pfeffer and Salancik, 1978; Dyer and Singh, 1998; Ford et al., 2003). There is no harm to say that these inter-firm relationships are the most important assets for company, to develop and manage these inter-relationships are the central task for any management team.
Möller and Törrönen, 2012 concentrated on complicated issue of supplier selection and stated that successful selection of a supplier is directly proportional to customer requirement and how much value creation potential they carry. Their hypothetical model can be seen below:

![Model of capability-based value creation](image)

*Figure 5. The model of capability-based value creation (Möller – Törrönen, 2003, pp 115).*

Their hypothetical model not only different but also helps to identify customer's specific value dimension, organizational specific capabilities that can range from production to incremental innovational potential and integrated relational ability to cope with customer's business. Möller – Törrönen made the so-called ‘relational value spectrum’ and created a general rule. Even though they did not deploy any direct relation between customer value dimensions and the capabilities required to make them. However, the model of capability based value creation and the developed relational value spectrum gives sign that such link may exist.
3 CUSTOMER VALUE AND PERSPECTIVE

3.1 Concept Of Customer Value

The customer value concept has been thoroughly discussed in the academic literature. There are different economics’ theories emphasizing the services and products value in the marketplace. The classical economic theory, for example, mirrors product value as characteristic (intrinsic) having association to the inputs manufacturing cost like labor and material and can be evaluated through any instinctively decided financial variable (Smith, 1904; Marx, 1967; Ricardo, 1975). The value, as indicated by the neo-classical theory, is subjective and dependent on or in respect to product utilization (Jevons, 1879; Marshal, 1961).

It is generally perceived that the neo-classical theory is based on the modern economic concept. Modern economic concept fundamentally accepts that financial actors approach solid evidences and achieve an incentive through reasonable basic leadership skills (rational decision making) that amplify their utility (people) and advantages (firms), diminishing their detriments (McKnight, 1994; Woodall, 2003). Opposing to this theory, it is believed by a few economists that the economic actors are not the rational decision makers all the time and are instead overwhelmingly idealistic. According to these economists, this is because of the lack of access to the perfect marketplace information (Simon, 1961).

As indicated by the behavioral theory of firms, joint efforts among the elements (groups or individuals) with their particular objectives. This theory mirrors that ideal and sensible trade off amongst elements and their objectives in specific situations deliver value. Financial actors, in the light of this theory, work under "limited soundness” that matches the economic thought that is further based on the idea of limited rationality. It recommends that the ability of decision making of the economic actors is limited because of less access to statistical data points, their analytical approach for dealing with the detailed research estimation of offerings by various
firms in available time and assets (March, 1978; Gigerenzer and Selten, 2002; Kahneman, 2003).

Table 3. Fundamental concept of customer value in different streams of the Literature.

<table>
<thead>
<tr>
<th>Theory</th>
<th>Definition</th>
<th>Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classical Economic Theory</td>
<td>It is the product itself that creates value</td>
<td>McKnight, 1994; Woodall, 2003</td>
</tr>
<tr>
<td>Neo-Classical Economic Theory</td>
<td>Utility and Profits when maximized, they create value</td>
<td>Jevons, 1879; Marshal, 1961</td>
</tr>
<tr>
<td>Behavioral Theory of a firm</td>
<td>Value creation under the optimal compromise of circumstances</td>
<td>Simon, 1952; Cyert and March, 1992</td>
</tr>
<tr>
<td>Transaction Cost Economic Theory</td>
<td>Minimizing the Transaction Costs results in Value creation</td>
<td>Coase, 1937; Williamson, 1975, 1985</td>
</tr>
<tr>
<td>Resource Based Theory of a Firm</td>
<td>When resources and capabilities are developed and deployed, they result is value creation</td>
<td>Barney, 1991; Amit and Shoemaker, 1993</td>
</tr>
<tr>
<td>Social Exchange Theory</td>
<td>Social exchange among actors leads to value creation and delivery</td>
<td>Thibault and Kelly, 1959; Blau, 1964</td>
</tr>
<tr>
<td>Prospect Theory</td>
<td>It is the relative gains and losses that matter in value derivation instead of final outcomes</td>
<td>Kahneman and Tversky, 1979</td>
</tr>
<tr>
<td>Marketing Exchange View</td>
<td>Delivery and production of services and products where value derives the services</td>
<td>Alderson, 1957; Sheth, 1976; Levitt, 1983</td>
</tr>
<tr>
<td>Sales Exchange View</td>
<td>When the customers' needs</td>
<td>Rackham and DeVincentis,</td>
</tr>
<tr>
<td>Relationship Marketing</td>
<td>are fulfilled, by exchanging services and products, Value is derived services</td>
<td>1999; Haas et al., 2012).</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------------------------------------------------------------------------------</td>
<td>--------------------------</td>
</tr>
<tr>
<td>Service Marketing</td>
<td>long-term relationships with customer to deliver value</td>
<td>Håkansson, 1982; Dwyer et al., 1987</td>
</tr>
<tr>
<td>Company’s ability to satisfy its customer better than competitors over time results in value derivation</td>
<td>Vargo and Lusch, 2004; Grönroos, 2011</td>
<td></td>
</tr>
<tr>
<td>Management and Organizational Theory</td>
<td>Service experience co-created by the customer and supplier creates value</td>
<td>Porter, 1985; Prahalad and Hamel, 1994; Slater and Narver, 1998</td>
</tr>
</tbody>
</table>

As indicated by the business cost economic theory of firm, value is not delivered by the genuine merchandise yet decrease in costs of transaction (Coase, 1937; Williamson, 1975, 1985). Briefly, it is revealed by this theory that in-house activities or outsourcing are the ways that help a firm getting added-value. The resource-based theory intends to outline that organizations possess set of unmistakable assets that can be utilized for delivering value and a focused edge over the contenders (Penrose 1959; Wernerfelt, 1984). This clearly indicates that firms ultimately deliver value through gaining and utilizing their prime assets and abilities (Barney, 1991; Amit and Shoemaker, 1993; Peteraf, 1993). According to Newbert (2008), obtaining means and aptitudes is insufficient but rather firm should be able to adventure them together. Next, the social trade hypothesis, not at all like the main economic exchange theory, exhibits that it is social interaction amongst players that helps in creating value (Thibault and Kelly, 1959; Homans, 1961; Emerson, 1976). The main focus of this theory is non-fiscal angles, for example, entertainment, relationship, and social values (Blau, 1964; Stafford, 2008). According to the social exchange theory, concrete information is accessible to the players and they adopt utilitarian choices.

As indicated by prospect theory, relative advantages and sacrifices are the factors determining the value in spite of a definitive result (Kahneman and Tversky, 1979; Tversky and Kahneman, 1991). This theory portrays the way the actors make decision
among the alternatives with known outcomes when faced with risks. This implies how they settle on decisions in the real life settings. For example, while assessing the substitutes' potential value, the actors consider negative aspects more than the positive advantages (Kahneman and Tversky, 1979).

In the marketing and selling exchange view, customer value is considered as the main element in the marketing literature (Sheth, 1976) and selling. This clarifies the firms offer the products that have a demand in the market and the individuals pick the products that provide the added-value (Levitt, 1983). The business writing expects to clarify that organizations try to satisfy the apparent needs of the customers through their offerings (Rackham and DeVincentis, 1999; Haas et al., 2012). As indicated by relationship marketing perspective, firms have faith in delivering value through building up connections with the customers on long-term basis (Håkansson, 1982; Dwyer et al., 1987). In the writings of purchasing and supply chain, customer value is considered as the center component of effecting the sourcing decisions (Wouters et al., 2005; 2009).

It is revealed by the service literature that value is created by the service involvement that is established mutually by the user and seller (Vargo and Lusch, 2004; Grönroos, 2011). In the light of management and organizational theory literature, there are three fundamental elements that are must for the business strategies of a leading firm. The three fundamental elements are ability to create value, ability to analyze the factors important for creating value in a particular product and being able to achieve the value over time (Desarbo et al., 2001). This concept of customer value has significant importance in several fields like innovation, sociology, finance and industrial engineering (O’Cass and Sok, 2013), since it is the base of all marketing activities (Holbrook, 1994).

At long last, there are distinctive arrangements of customer value types. Some give classifications inside which to groups sorts of significant worth (value). For instance, Sheth, Newman, and Gross (1991) recognize five classes of significant worth that may be given by an item: epistemic, emotional, social, functional and restrictive esteem or conditional value. Two perspectives are recommended by Holbrook (1994) on which
customer value types differ. Customer value might be natural for the product (intrinsic) or extraneous (extrinsic), and it might act self-oriented or other--oriented. Classification of customer value concepts can be seen in the table given below:

### Table 4. Classification of Customer Value Concepts.

<table>
<thead>
<tr>
<th>Nature of information is</th>
<th>Snap shot</th>
<th>Longitudinal</th>
</tr>
</thead>
</table>

There are other classifications that go above and beyond by determining connections between types of value. For example, Burns (1993) portrays how four unique value types, including product value, possession value, value in use and overall interface together in a purchaser's assessment procedure.

### 3.2 Customer Value By Customer Driven Idea

The developing collection of calculated information about customer value is much divided, with various perspectives pushed and no broadly acknowledged method for pulling every one of these perspectives together. Maybe that clarifies, to some extent, why utilizations of the idea in today's associations likely are not taking the full advantage of its abundance and multifaceted nature. To propel the act of organization management toward the customer value, it is the time for merging these perspectives. Consider the this definition: Customer value is the perceived inclination and assessment of the customer for those product qualities, characteristic exhibitions, and
use driven consequences that ease out or restrict the accomplishment of the customer's objectives and purposes being used circumstances. This definition receives a customer point of view on empirical research into the way customers consider the value and the value driven from this research (Gardial et al. 1994; Richins 1994a, 1994b; Woodruff, Schumann, Clemons, Burns, and Gardial 1990; Zeithaml 1988). Both the received and desired value is incorporated in this definition and it is emphasized that value is created from the learned perceptions of the customers, their preferences and evaluations. It additionally interfaces together the products with utilizing situations and related outcomes experienced by the objective oriented customers. There is a conceptual framework, originating from a means-end type of model, which is anchoring this definition. In spite of the fact that this model initially was proposed to depict the ways customers classify the product information in memory (Gutman 1982), it can be adjusted to catch the essence of customer value (Woodruff and Gardial, 1996) (see left-hand column in Figure 2).

![Figure 6. Customer Value Hierarchy Model (Woodruff and Gardial, 1996).](image)

The hierarchy of customer value proposes that customers think about the desired value in a means-end way. Beginning at the base of the command chain, customers figure out how to consider products groups of particular characteristics and their performance. When they obtain and utilize a product, they frame desires or inclinations for specific qualities in view of their capacity to encourage accomplishing desired outcome experiences, reflected in a value being used and value of possession,
in the next level of hierarchy. Moreover, customers figure out how to seek certain outcomes as indicated by their capacity to enable them to accomplish their objectives and purposes, that is the highest level.

When hierarchy is viewed in descending order, it reveals that goals and purposes are factors considered by the customers for attaching importance to the consequences (outcomes) (Clemons and Woodruff 1992). Likewise, while attributing significance to the characteristics and the trait exhibition, importance consequences are the factors that guide the customers. Received value is equally well described by the hierarchy of the customer value. Customers assess items utilizing the same coveted characteristic, result, and objective structure that they have at the top of the priority list around then (Gardial et al. 1994; Zeithaml 1988). In addition, the situation of customer’s use has a significant role both in desires and in evaluation. In case the utilization circumstance changes, the linkages between item properties, results, and objectives and purposes change also. For instance, a customer's value progression for Internet administrations utilized at work may not look quite the same as the hierarchy for those administrations utilized at home for the purpose of entertainment.

### 3.3 **Customer Satisfaction Measurement**

The tools for the idea of upbringing the customer voice into an association have been discussed by some of the authors like Anderson et al., (1993); Griffin and Hauser, (1993); Woodruff and Gardial (1996). However, the question arises is how well such tools are incorporated into the process of customer value learning by today’s organizations? According to quality management, Customer Satisfaction Measurement (CSM), if examined may bring up some answer to the above question.

Customer Satisfaction Measurement begins with targeting some particular customers for the purpose of learning and lost, current, and potential customers may also be included in it. Afterwards, customers’ particular requirements, needs or desires are determined using CSM. Typically, the key buying criteria of the customers is identified, which are considered as the desired or preferred attributes of the customers (Anderson et al. 1993; Day 1990; and Gale 1994). The boundless utilization of multi-
trait models of consumer choice presumably represents this distraction with the properties (Day and Wensley 1988). Basically, this progression measures one type of purchase value desired by the customer.

**Customer Value Determination Process**

1. What do Target Customers Value?

2. Of all the Value Dimensions that Target Customers want, which are more important?

3. How well (poorly) are we doing in delivering the value that target customers want?

4. Why are we doing poorly (well) on important value dimensions?

5. What are target customers likely to value in the future?

*Figure 7. Customer value determination process (Anderson et al. 1993; Day 1990; and Gale 1994).*

In order to develop a better understanding of customer value, there is an extended framework that the customer value determination offers. The approach of particular product attribute for CSM leaves considerable room for improvement. The concept of taking advantage from the considerably richer customer value hierarchy is recommended by Woodruff and Gardial (1996). They portray an extended “customer value and satisfaction learning process, called customer value determination (CVD)”, in view of this idea. CVD is intended to make it easy for the managers to get the answers to basic inquiries that ought to guide finding out regarding their customers. Like CSM, the CVD procedure starts by recognizing the target customers, those whose value matters to the seller. In any case, after that progression there are imperative contrasts from the practice of current CSM.
Techniques have been used for the provision of complete information about the desired hierarchy demanded by the customer. Analysis techniques and laddering interviews have been studied to be effective for attracting the consumers associations for the value, goals, consequences and attributes of the product (Reynolds and Gutman 1988). Nevertheless, such strategies are limited as there are merely a few associations to what consumers declared. Thus, there is a need of new techniques for exploring the entire range of the dimension, especially the consequences. Woodruff and Gardial (1996) suggested the technique of grand-tour when the maximization of consequences value measurements were explored. The technique utilized the personal interviews for the customers’ occasions and situation analysis for using the product.

Secondarily, in case of the uncomplicated products, some of the consumers might also express the preferences for the consequences and attribute value dimensions (Griffin and Hauser 1993; Woodruff and Gardial 1996). Another step has been introduced by CVD for the screening of value dimensions in order to unveil the second question demonstrated in the figure 4. The actual method of screening is unknown, an approach for this is the input placed by the consumers. However, the current procedure of determining the consumer’s perception is not applicable for the screening task. For instance, scaling techniques are prioritized, which include the derived importance, ranking scales and rating scales with the help of conjoint and regression analysis which are able to handle certain level of value dimensions. However, even more input is required in order to overcome the shortcomings. It has been suggested by Woodruff and Gardial (1996) that screening on the basis of a certain criteria might result in the reduction of value dimensions’ list in a more manageable way that can be handled by the available techniques.

Thirdly, CSM survey technique is used in the CVD for answering the third question mentioned in the figure 3.2. Nevertheless, managers are encouraged in this way for learning the evaluation methods of sellers that contribute both the attribute and consequence levels of the consumers. A seller, for example may want to interact the industrial consumer for a longer period of time, but may get disconfirmations and limited performance data about the services and product attributes (say, delivery time or product quality). The seller is required to learn the perceptions of the target
consumer as he expresses in the evaluation like, “assist me to find the new opportunities in the market,” or improving the technology in the product and operations development.

Next, the current technique seems to question the managers about the generation of new tactics and strategies for the improvement of the delivery values on the basis of the general satisfaction scores, disconfirmations or quantitative performance. Such practice further disregard the fact about the inability of surveys to evaluate the sellers’ weaknesses and strengths for the delivery of desired values which are provide an extent of insight about the consumers’ evaluation. For instance, a rating on the disconfirmation may express the consumer’s perception about the seller for “on-time delivery.” However, there are certain reasons for this perception including the reinforcement of the perceived strengths as well as the improvement of the weaknesses that lead the manager to ignore the typical results of CSM. Subsequently, CVD is further incorporated to follow up the satisfaction obtained from the provided reasons about the low or high satisfaction scores. These qualitative techniques are further suited for the exploration of consumer’s reasons about the rate of satisfaction. Ultimately, CSM suppresses the understanding of the consumers; current opinions and perceptions. Furthermore, the strategic decisions also provide advantage from understanding the changes about the value, desired by the consumer. The estimate about the customer value lead the sellers to act according to the consumer have delivered strategies. Such strategies are able to provide the competitive advantage to the sellers. As soon as the organizations learn to make these predictions, they can quickly react to the changing needs of the consumers.
4 KNOWLEDGE CREATION AND MANAGEMENT

4.1 Knowledge Based Perspective

Strategic management literature covers the knowledge based understanding about the company (Alavi & Leidner, 2001; Nonaka & Takeuchi, 1995). The key resource in this regard is the organizational knowledge while several aspects articulate the capability to deploy the knowledge about the organization in terms of the organizational benefit (Teece, 1998; Tsai & Ghoshal, 1998). Moreover, it is assessed that the main benefit which a company may have comes from the efficiency it shows for the knowledge it has (Davenport & Prusak, 1998). Likewise, the traditional organizations start to understand the inter-organizational administration and the knowledge, along with the organizational and individual abilities are the critical aspects of sustaining and gaining the competitive advantage (Davenport & Prusak, 1998). Knowledge Management (KM) reinforce the quest of value and innovation creation. KM, in these terms perceive a framework about the organizations' processes, structures and goals in order to determine the way in which the organization determines the value to be created and learned for the sake of community and customers (Choo, 1999).

Variable assessments of the knowledge emerge variable perspectives about the KM, including, 1) Information technology (IT), which focuses on the utilization of several techniques of storing or acquiring the knowledge possessions (Borghoff & Pareschi, 1998), 2) socialization standpoint focuses on the assessment based on the nature of the organization (Becerra-Fernandez & Sabherwal, 2001; Gold, Malhotra, & Segars, 2001), and finally 3) the information system (IS) standpoint that focuses on both the organizational capabilities and IT, accentuating the knowledge usage about the management system (KMS) (Schultze & Leidner, 2002; Tiwana, 2000). This perspective forms the basis of this research. The definition and scope of KM did not evolved at once. Presently, there are over three KM generations (Vorakulpipat & Rezgui, 2006). Knowledge sharing is the first generation that focuses on the supply-
side KM” in terms of IT (Koenig, 2002; McElroy, 1999). “Demand-side KM” or the knowledge creation is the second generation (McElroy, 1999). Value creation is the final generation (Vorakulpipat & Rezgui, 2006).

Starting from the knowledge, it can be described as something which can be organized or created with the information flow, embedded in the beliefs and commitments (Nonaka 1994, p. 15). Therefore, knowledge can be termed to identify with the sustained belief or the information produced, yet the received information is about the possibility of the popularity of the source (Dretske 1981, p. 86). For example, in terms of the management consults, where the information is confined to the consultants, like the strategic management, the consulted person perceive it as the knowledge or the information which is not already known. Therefore, knowledge can be defined as the information that an individual has along with the beliefs, yet difficult to be expressed (Polanyi 1966, p. 4).

Consequently, if knowledge is perceived by anything which is created out of the stored or flowed information, how can the information be defined? It has been argued by Dretske (1981, p. 44) that information comes out to be as a product which is able to yield knowledge and the type of information that the message has is something that is perceived from this knowledge. Therefore, information can be defined as the methods of communicating and creating the knowledge. Information and knowledge have been discussed by Drestke (1981) and Nonaka (1994) in terms of the philosophical meanings and for the research purpose. Furthermore, information can be described as the explicit knowledge present in the patents, reports, books or etc. Implicit knowledge or the tacit knowledge provides the know-how which is acquired by the professionals and experts through learnings and routines by practicing and is supposed to be extremely difficult to transform into an obvious type (Miles et al. 1995, p. 15.). Both the explicit and tacit knowledge is provided by the networks, organizations, groups and even individuals (Kogut & Zander 1992, p. 388). While, tacit knowledge is considered to be more valued in terms of the organization as it can be related to the action and be utilized for making firm decisions (Alavi & Leidner 2001, p. 113). Moreover, tacit knowledge gives the information about managers, experts, and professionals as it involves the cognitive knowledge and mental models of the
aforesaid participants (Davenport & Prusak 1998, pp. 5-6). The current research is not entirely macro-economic, yet it focuses on the organization, where knowledge is enclosed to the cognitive abilities of the organizational administrators, like the business units, groups or individuals. Information is further explained in terms of explicit knowledge such as white papers, statements, and reports which are not stored in single entity, group or individual. It has further been argued that knowledge is anything which includes problems, yet it cannot be fully understood. Nevertheless, it appears to achieve anything valuable and good (Alvesson et. al, 2004).

4.2 Knowledge Management Systems (KMS)

The category of information system pragmatic to the management of the organizational knowledge is called as the knowledge management systems (KMS) (Alavi & Leidner, 2001). It means that they are based on IT systems for the enhancement and support of the organizational processes of knowledge application, transfer, retrieval/storage and creation. Most of the initiatives regarding this, consider IT as the basic enabler, which tends to overlook the cultural and social facets to support KM (Davenport & Prusak, 1998; Malhotra, 1999).

The literature review about the IT application for the organizationa KM initiative shows three applications as described by (Alavi & Leidner, 2001):

1. The knowledge networks generation,
2. The corporate directories of knowledge
3. The sharing and coding of good practices

The most used application is based on the benchmarking which aims for relocating the best practices (O’Dell & Grayson, 1998). Whereas, KMS further works on the normative means (Schultze & Leidner, 2002), whereas, the approach of interpretation reflects best the supportive environments in the development of the ‘communities of practice’ (CoP) (Wenger, McDermott, & Snyder, 2002). These initiatives attract the interests form either the corporate senior or research community management staff outside or in the company. They are more related to the individuals throughout the
organization that have common set of issues, have deepen knowledge and understanding of the area, the passion of the topic or the concern which is communicated by virtual or face-to-face means. The Community of Practice is further reinforced with the value and innovation creation as it can be widely identified by the endowed personnel who are well-connected by the communications means throughout the organization. KM is further observed within the literature of management. In the long run, organizations want to rely on their persistent knowledge. In addition, they explore the ways to enable them to flourish their existing knowledge (Macintosh, 1997).

Knowledge is further regarded as the significant component that the organization may possess while being the most critical economic standpoint (Drucker, 1985). Thus, significant struggle is being carried out for the determination of the methods to manage, retain, represent and acquire it. González-Loureiro, Vila, and Schiuma (2015) articulated that the basis of this lies in the expertise of combining knowledge for ensuring the competitive advantages of the firm. Furthermore, the company's ability to apply, locate and maintain this knowledge lead them toward the development of the systematic techniques for proper management (Alavi & Leidner, 2001).

The research held by Martelo-Landroguez et al. (2011) highlighted that KM provides the growth in both the professional and academic levels. Here, the KM literature is full of the processes that show its criticality in terms of Absorptive capacity. Adsorptive capacity can be described as the development and replacement of new knowledge. It further includes the performances of looking for innovative knowledge and information (Chen & Edgington, 2005; Cepeda, Cegarra, & Jimenez, 2012), which leads to the creation of new knowledge (Pentland, 1995). Cohen and Levinthal (1990) described the firm’s capability to identify, applying and assimilating the external knowledge is based on the commercial objectives. Absorptive capacity (ACAP) concept is further explained in a broader view as the organizational processes and routines which are used to exploit, transform, assimilate and acquire the knowledge for shaping the organization abilities (Zahra & George, 2002).
The capability of the organization to apply the external knowledge effectively is considered as the crucial factor for the industries which possess their concern for the achievement of the innovation outcomes as well as more advantages (Cohen & Levinthal, 1990). The ACAP act as the performer in order to enable the knowledge conversion to the new process, services and products for supporting innovation and thus, the ability of the firm to limit the competitive forces (Newey & Zahra, 2009; Leal-Rodríguez, Roldán, ArizaMontes, & Leal-Millán, 2014).

The concept of knowledge transfer can be defined as the exchange of knowledge which lies between the groups and individuals, and to explicit sources from individuals and to the entire organization from the groups (Szulanski, 1996). Nevertheless, there are several perceptive and motivational limitations of the knowledge transfer (Alavi & Leidner, 2001). For example, there may be certain resistance form employees to accept new knowledge from other sections, departments of groups as it is different from the existing knowledge. Chang, Gong and Peng (2012) illustrate that in order to overcome such hindrances, the KM researchers investigate difference facilitators in order to effectively transfer the knowledge. Social capital is one of these considerations as described by Kang and Kim (2013) and Kang and Hau (2014). It is further conceptualized as the common exchange of knowledge among the recipient unit and source, including the two components and agents, a recipient and the source. Social relations can be stimulated and facilitated for the exchange of knowledge as described by the social capital theory for both the recipient and the source. In terms of the knowledge source, smoother relations among the employees can be a source of enhancing trust, thereby, facilitating the knowledge transfer. In terms of the recipient, good relations among the coworkers may further facilitate the dissemination of varied and different knowledge. Though, recipient lacking the related knowledge might face some trouble about accepting the source’s knowledge. This resistance and lack of previous knowledge leads to the lower capacity of absorbing new learning (Kang & Hau, 2014, p. 759).

Likewise, another relevant process is the knowledge application (KA) as Alavi and Leidner (2001) described that the competitive advantage of the company is not in the knowledge rather lies in the application. KA is described as a complicated procedure
as it has a loop. ACAP is needed for KA to be functional and for the transference of essential mechanism for sharing and storing of knowledge. On the contrary, as the knowledge is applied by the feedback method, the results are evaluated for the applied knowledge with the deviations from the expected outcomes. As a result, new knowledge will be created that might be transferred and stored. Thus, internalization in terms of knowledge is involved in KA. Martelo-Landroguez et al. (2011) explained that if an organization wants to exploit the knowledge it has, it should understand the way knowledge is applied, shared and created. Such processes are considered as essential and fundamental for the effective and adequate management of the knowledge. There is no specific linear consequence of these processes, therefore, only a few of them can be included.

This quotation specifies two important ideas of interest, the knowledge at organizational and individual level and the knowledge possessed by the people of organization and the knowledge opposed by something that is represented in the books and procedures. The discrepancy in this information is distinction among the tacit and explicit knowledge. Public knowledge is also referred as explicit knowledge as it highlights those factors which are entailed to the individuals. However, tacit knowledge has personal nature, which involves the intangible aspects like values, perspectives, personal beliefs and the experiences. The key premises are underlined by Polanyi’s distinction, asserting the closer association of the actions and knowledge. The main issue here is largely the tacit knowledge that explicating and defies recording, while being indispensable for the productive knowledge.

Though, these aspects of tensions highlight the main problems of KM, they lack the ability of representing the functions (Table 5). The figure shows two basic problems with KM.
Table 5. Assertion of value of knowledge for organizations leading to objectives of knowledge management (Hendriks et al., 1999).

<table>
<thead>
<tr>
<th>Value of Knowledge</th>
<th>Focus of knowledge management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application of knowledge ('do what you are good at' is associated with the static nature of knowledge assets)</td>
<td>Getting the right knowledge at the right place at the right time</td>
</tr>
<tr>
<td></td>
<td>Associated knowledge related process: transferring knowledge</td>
</tr>
<tr>
<td>Creation of knowledge ('reflects upon what you are good at, stay good at it, or become even better' is associated with the dynamic nature of knowledge assets)</td>
<td>Organizational memory, avoiding knowledge erosion</td>
</tr>
<tr>
<td></td>
<td>Associated knowledge related process: acquiring and codifying knowledge</td>
</tr>
<tr>
<td></td>
<td>Assuring the condition for innovation and knowledge creation</td>
</tr>
<tr>
<td></td>
<td>Associated knowledge related process: creating knowledge</td>
</tr>
</tbody>
</table>

1. Management of the available knowledge
2. Management of the innovative knowledge

The first one involves the improvement in the usage processes of the knowledge, ensuring the right place of using the knowledge at right instance. It can further be associated to the static nature of the resources. The second one is for the improvement of the conditions of knowledge creation. It suggests the significance of knowledge beyond its requirement at the particular time. The issue here involves the active natures of the resources of knowledge. At this instance, the idea of learning organization emerges out. Besides these two problems, another problem can also be noted which is about the knowledge storage. In order to achieve this aim, the understanding of corporate memory is needed. An organizational memory may not be enough for applying the knowledge, but may be required for the new knowledge. An organizational memory may be assured by avoiding the erosion of the knowledge. It takes the situations to the instant where there may be no increase in knowledge, or the organization starts to lose its knowledge. It happens, when a person resigns or retires and his experience and knowledge are not given to any of his successor.

A practical overview of the knowledge management and its implementation can be seen in figure below. There is a representation of three problems and objectives into
the measurements and goals for the purpose of knowledge management. Several measures of knowledge management have been assessed.

There may be three classes, viz. organizational measures (including the multitasking, job rotation, virtual organizations, fuzzy structures and team-work), those found under the human resource organization (including dedicated evaluation routines, financial programs, training programs, employability, career ladders and competence management) and finally those related to the information systems (including the intranets, groupware, retrieval and imaging system and intelligent document). KBS may be effectively applied to KBS. Their implementation and exploration are feasible in terms of KM. For example, they have been securely promoted against the erosion of knowledge as a tool of retaining the knowledge within the organization and for supporting the situations by solving problems.

### 4.3 Next Generation Of Knowledge Management

There is an interaction among the KM and value creation, therefore, many researchers have investigated KM in this context (Chase, 1997; Despres & Chauvel, 1999; Gebert, Geib, Kolbe, & Brenner, 2003; Liebowitz & Suen, 2000). Furthermore, researchers have suggested that value creation can be used to describe knowledge (Despres & Chauvel, 1999). KM can also be included with the value creation in order to measure intellectual capital (Liebowitz & Suen, 2000). The KM processes further have the
capabilities of value creation in case of the organization (Gebert et al., 2003). In a pragmatic view, there is a framework of knowledge and value creation within the professional firms of services (PSFs) (Løwendahl et al., 2001). The knowledge-intensive activity is used to describe the knowledge creation in terms of PSFs, which is provided by the employees that are associated with the scientific and research development. This structure incorporates the relation among the choice of domain and the knowledge, while arguing about the linkage explains value creation processes (VCPs), in two integrated dimensions, the indirect and direct value creation for the valuable clients. It assures the higher interest of KM perspective for value creation. Vorakulpipat and Rezgui (2006) emphasize that this value creation is recognized gradually with the emergence of next generation of KM. Thus right after the creation of knowledge, the effect on the individuals for the value creation is needed to be determined. Literature shows five aspects of value creation, which are as follow:

1. Human networks
2. Social Capital
3. Intellectual capital
4. Technology assets
5. Change processes

4.3.1 Human Networks:
Organizational learning is needed to be significantly dynamic and the social prosperity and intangible resources are expected to generate significant effect on KM (Allen, 2003). For instance, the idea about Community of Practice (CoP) has been observed to be an efficient social action for sharing the tacit knowledge. It results in the promotion of human networks, while inspiring individuals to create and share knowledge.

Insubstantial resources might have the ability to generate more of the physical or substantial resources. Three aspects of insubstantial, constituting structural capital, external capital and human capital are anticipated to create the sustained societal and organizational values with the future benefits. It includes the corporate identity, environment health social citizenship, human competence, internal structure and business relationship. After it is being created tangible and intangible values can be
involved to be the parts of the networks in order to create the interactions among the organizations, groups and people.

Human capital has also been studied to improve the value creation in certain ways. For instance, informal and formal communication as virtual and face-to-face means have been perceived to be effective for the promotion of knowledge creation and sharing (Frohlich et al., 1994). Researcher have demonstrated the informal communication as a preference (Powell & Dent-Micallef, 1999). The team’s overall project performance is observed to be enhanced by the early meetings and subsequent effective communications (Ramesh & Dennis, 2002).

4.3.2 Social Capital

KM has recently been studied in the context of social capital (E. Lesser & Prusak, 1999; E. L. Lesser, 2000; Nahapiet & Ghoshal, 1998). These concepts of human capital, financial capital, physical capital and social capital are applied for the firm’s value addition. On the basis of the emphasis regarding cooperation and collectivism instead of the individualism, the community members in isolation are observed to be inclined for using and inclining the electronic network as they are encouraged to share their knowledge. The socio-technical procedures also identify KM tool in support of the social capital in order to approach social groups (Huysman & Wulf, 2006). These procedures might also substitute the social capital through the virtual spaces of communication, providing the history and context of interaction, while offering the element of motivation in order to further encourage the individuals for sharing their knowledge in their groups and communities. There is a marked linkage in the firms and social capital value creation as described by Tsai and Ghoshal (1998). This relation is reinforced by the available research. In addition, the organizational structure in terms of social capital also assist people for the development of understanding, respect and trust, particularly about the strong organizational culture of bureaucracy. It ultimately adds into the value creation.
4.3.3 Intellectual Capital

The most rapid diffusion is assessed by the intellectual capital through the current era and is getting attention as a growing area in the field of KM. Rastogi (2000) illustrates that it includes the organizational capabilities, expertise, competencies, skills, innovation and learning. It has been further exhibited value creation can be used for the KM metric in measuring the intellectual capital (Liebowitz & Suen, 2000). This metric involves the relationship development, employee satisfaction, R & D investment, and training etc. It has further been suggested by Nonaka et al. (2000) that learning with the practical experience can lead to the explicit knowledge and to the tacit knowledge by the method of internalization through the process of SECI. Further, the training programs can also be helpful in the development of understanding among the trainee, with the help of reading manuals and documents which can internalize further, the written information presented in the documents for the enrichment of the tacit based knowledge. Likewise, Tan, Wei, Huang, and Ng (2000), Van Ryssen and Hayes Godar (2000) and Warkentin and Beranek (1999) highlighted the fact that the adopted training is able to foster the higher quality decision, individual satisfaction, teamwork, trust and cohesiveness. Additionally, confidentiality and IPR issues must not be enhanced to the extent that the sharing process for the external knowledge impart higher risk as compared to the internal sharing as it raises the complicated issues of the copyright and confidentiality and especially in terms of the private sector, it further includes the proprietary resources. In general, the interdependent union about the collaborative capabilities and intellectual resources enhance the collaborative technologies, while KM activities increase the rate of the value creation within an organization.

4.3.4 Technology Assets

Enhancing and managing the organizational procedures about the application, transfer, retrieval/storage and creation of the knowledge has been relied to its wider use of the knowledge management system (KMS). It can be assessed that the technology, in combination with KMS has been a necessary tool for the value creation. IT applications within the organizational management have been further assessed to be focused on certain common levels of applications. It includes, 1) the sharing and coding of the better practices, 2) the generation of the knowledge directives in
corporate, and 3) the designing of the knowledge networks. In these terms, the KMS initiatives are relied upon the important IT enabler which they are intended to oversee in terms of the socio-cultural factors that fortify the management of knowledge (Huysman & Wulf, 2006).

Furthermore, Vision (2003) articulate the KM in future as to be envisioned as 1) the focus on the technology of KM that fits into the specific organizational culture, 2) the capability of embedding KM technology into the general environment and 3) the effortless and simple usage of technology for enhancing the interactions. Virtual interactive workplace, mobility, processing, natural language and semantic web are the other important factors. The KM in next generation will effect on the shaping of artificial intelligence and IT development and will lead to the expectation of the supportive innovations (Wiig, 1999).

4.3.5 Change Processes

In terms of the change process, the management plays the role of sustaining the competitive organizational terms (McAdam & Galloway, 2005). There are two predictions about the future structures that include resistance to change and the change itself. The survival of the organization is highly dependent on the ability to adopt the change and then mastering the challenges. There are two issues about the organizational change, human and IT issues. The human issues generate in terms of the organizational policies for the motivation of the employees in the creation and sharing of the knowledge by the provision of financial reward. On the contrary, organizational ability for technological adoption has also been overseen. Technology adoption model (TAM) proposes the perceived ease of use and the usefulness of the information system and the innovations that directly impact on mediating the behaviors (Davis, 1989). Researchers also agree that the process of change is important for creating the societal and organizational values. KM roadmap is also a milestone in enabling the organizational assessment to be effective implementation of the KM. another value creation segment can be determined by the appropriate combination of the change processes, technology assets, intellectual capital, social capital and human networks where the issues like trust and learning are blended to envision the value creation based on knowledge.
4.4 **Knowledge Of Customer Expectations**

Client desires are seen as cravings or needs of buyers. That is, the thing that the clients feel an item ought to offer instead of would offer (Gilbert and Wong, 2003). These desires are the pre-utilization convictions that buyers draw upon as the likelihood of event of positive and negative occasions (Parasuraman, Zeithaml, and Berry, 1988). It is the pretrial convictions about a decent or administration that fills in as gauges or reference focuses against which great or administration execution is judged (Woodruff, 1997). At the end of the day, it is the apparent esteem clients that are looked for from the buy of an item. This "apparent esteem" is the exchange off between what the client gets (for instance, quality, benefits, worth, utilities, overflow) and what the clients offered up to gain and utilize an item - for instance, value.

In making a purchase decision, customers look out for certain attributes in a products offering. These attributes are pre-conceived as they occur before purchase. As a pre-trial or pre-consumption beliefs or standard of performance reference judgment, these expectations are formed with the aid of information sources like prior exposure to the products, word of mouth, expert opinions, advertisement, as well as prior exposure to competitive product (Zeithaml, Berry and Parasuraman, 1993). And through an evaluation of products’ performance, customers form what is called "confirmatory or dis-confirmatory judgement". The customers’ judgements of satisfaction or dissatisfaction result from the process of confirming or disconfirming their prior expectations (Arambewela, 2003). The general consensus however is that customers equipped themselves with pre-conceived desired attributes of a product or service. These attributes (expectations) are then compared with what is given (perceived attributes) to form judgement - a positive or negative of the products offering. The gap between the customer expectations and perceived product or service performance is the degree of satisfaction or dissatisfaction.
Thus knowing what the customers assume may possibly one of the most crucial step of the delivery of product to fulfill consumer's requirements and may impart a severe impact on the overall profitability of the firm, value creation. So, firms must engender effort to capture these expectations and design its product offerings in way that it will reflect these expectations. As customer expectations become the core of firm's business philosophy, the challenge for the firm will be to capture such knowledge of customer expectations (KCE) and translate these into product offerings of superior performance. Thus KCE becomes the core of firm's strategic resource.

Knowledge is also described as a processed information and data. It is the data possessed in the mind of individuals that are relating to the judgements, observations, ideas, interpretations, concepts, procedures and facts (Alavi and Leidner, 2001). Often, it is a product of raw data or information or observation that is subsequently transmuted into what Nonaka and Takeuchi (1995) describes to be “justified true belief” which enhances the product's capability in terms of the effective decision making. It involves the dynamic integration of ideas, information, values and experiences which provide a structure to incorporate and evaluate the new information and experiences. And like Davenport and Prusak (1998) and Alavi and Leidner (2001), Gottschalk (2005) described that information in combination with the creativity, intuition, reflection, interpretation, context and experience can lead to the development of knowledge (Davenport and Prusak; 1988).

Nonaka and Konno (1998) further categorized knowledge into explicit and tacit knowledge. The tacit knowledge was designated to be the individual perception of reality and vision for the future. This type of knowledge is not easily visible. It includes knowledge like intuitions, hunches and subjective insights, while the explicit knowledge is described as knowledge that may be eagerly transmitted among the individuals systematically and formal. This knowledge includes scientific formulae, specification, manuals, and the likes. However, for the firms, knowledge is embroiled in the whole gamut of its activities. That is, the cooperative amount of firm’s resources based on humans, infrastructure assets, markets and intellectual property assets (Brooking, 1996). It is the firm's know-how, the firm's technological competences, which reflect the experience and skills of the distinctive ways of
experiencing things within the firm (Teece, 1998). Ultimately, firm information comprises the processes, products, rules, routines, culture, values, expertise, insights, intuitions, ideas, skills, technologies and experiences that are transformed into products for commercial end.

As knowledge becomes a key resource of the firms, the concept of knowledge of customer expectations (KCE) from this perspective could be described as “what the firms know about the customers”. It is the processed information relating facts, values, ideas, observation as well as judgement of customer expectations. It includes intuitions, hunches, subjective insights, scientific formulae, specification and manuals about the expectations of the customers. It is more like a strategic resource a firm can use to make effective decisions about the nature of customers’ needs/expectations as well as increasing its productive and innovative capabilities. With KCE, a firm becomes more proactive in the process of designing and developing product offerings that can capture and meet customer expectations, and if possible, exceed them. Importantly, firms that are poised for success in this sternly competitive global market must evolve process by which such KCE is timely capture and translate into deliverables that lead to value creation.

### 4.4.1 Sources of Knowledge of Customer Expectations

Doubtlessly, KCE is firm-specific knowledge and the timely capture and creation of KCE can help firms develop the capabilities to tailor products to meet or exceed customer expectations. For example, it is common practice among firms like Dell Computer and HP to create pop-ups on their websites which allow customers to feed into their platform salient and valuable information about their tastes, preferences and challenges. This kind of information form a critical and latent knowledge that help these firms to continuously develop and deliver product offerings of innovative features that meet customer expectations. Though this is not exhaustive, firms can capture knowledge of customer expectations through:

1. **Word-of-Mouth (WOM):** the idea of WOM is used for the spoken messages and the ephemeral oral among the recipient and the source that communicate actually (Buttle, 1998). It is usually spontaneous and borderless (positive or
negative) and it disappears instantly as it is released. Generally research has support the idea that WOM has been considered to be more influential on behavior as compared to the marketer-controlled source. It has been shown that it influences a several conditions like the behavior, behavioral intentions, attitudes, perceptions, expectations, and awareness (Buttle, 1998). For example, it has been contended that WOM is has more significant impact in advertising the securing and innovation decision to experience any product for the first time. With WOM, a firm can get a firsthand knowledge of customers” expectations and redesign its product or service to reflect such. For example, some stores have on-ground personnel who engage customers in one-to-one communication to get immediate knowledge of customers” perception of their product offerings. If well-articulated, WOM provides viable platform for the firm to capture customer expectations and create KCE for the firm.

2. **Co-creation**: Doubtlessly, the evolving pattern of the global business environment has change the role of customers from the receivers of what the firms produce to source of firms”” competence. They have become co-producer or according to Lengnick-Hall (1996) "partial employees” that provide vital input in the determining firm competence, product/service designing, testing and features. Cocreation is the process in which a firm allows customer to design a system in consistency with the service and product (Prahalad and Venkatram, 2000). That is, the customers is allows to determine the features and performance of a product offering. Dell Computer for example, created the “build-to-order” platform on its website that allows customers to design and create products of their tastes and preference.

This trend is influence by the informed and sophisticated nature of customers” knowledge of products and information technology (internet). With co-creation, a firm not only learns the dynamics nature of customers” tastes and preference, it enables the customers to take full advantage of all the potential benefits embedded in a product offering. Thus by allowing the customer direct or indirect opportunity to make input in product features and performance
design, the firms create opportunity to create KCE for current and future capability.

3. **Experience:** Experience has been widely accepted to influence or shape customers’ expectation in the study of customer satisfaction/dissatisfaction process. In Muller and Tse's (1991) investigation of whether post consumption emotional responses can be traced to customer's expectation, performance, and norms from previous experience, primary evaluation of the experience and the disconfirmation expectations. They revealed that customers’ post-consumption experience can be trace to the point when of customers prepare for the consumption experience (pre-consumption experience). That is, the final decision to purchase a product or service is influenced by customers’ pre-consumption experience. Experience is the emotional response to direct or indirect consumption of a product offering. The direct and indirect consumptions come in form of pre-consumption and post consumption of product. The pre-consumption represents the customers cognitive formation of how the customer prepares for the consumption experience (Muller and Tse, 1991) while post-consumption is the emotional response after the consumption of a product. For example, the atmospheric condition of a store offers a would-be customer the opportunity to develop pre-consumption emotions towards a product or service. As customers rely primarily on pre-consumption and post-consumption experience comparison standards (McGill and Lacobucci, 1992) as these experiences shape their satisfactory/ dissatisfactory standards, firms must also realise that customers may not be willing to accept the company-based experiences.

Progressively, there is a need to shape the experience by the consumer, himself, both in terms of expertise and individuality (Prahalad, and Venkatram, 2000). Thus firm can help customers to shape and develop pre-experience comparison standards rather than allowing the customers to construct evaluations after the fact (Muller and Tse, 1991; McGill and Lacobucci, 1992) by allowing them to exploit all their senses through the staging of activities and interactions. This process provides a platform for the firm to capture latent
and salient issues of customers’ expectations as these expectations can be shaped by customers’ pre-consumption experiences.

4. **Feedback:** Generally, feedback is a post-consumption response of customers to product offerings. It is through feedback customers get the opportunities to react (positively or negatively) to a firm product performance or service delivery. It gives the customers the chance to voice their frustrations. With the multidimensional alternatives available to customers to seek redress to their complaints, firms have discovered that feedback systems are not just a mere platform to address customer complaints. Rather, it is a system that promotes continuous learning and innovation. Importantly, through reaction firms get to comprehend what customers expect and it can then align its product offerings to reflect these expectations. These sources of knowledge of customer expectation is critical to any firm delivery of value to the customer as it allows them to capture both expressed and latent customer expectations thereby developing superior solutions to these expectations.

5. **Data mining:** it is a business handle for investigating vast measure of information to find significant examples and principles and afterward exchange it to an implicit learning. It is a business procedure that cooperates with different business forms. Specifically, a procedure does not have to begin or end: it is progressing. Information mining begins with information, at that point through examination educates or moves activity, which, thusly, makes information that sires more information mining. The associations that need to exceed expectations in their business by utilizing their information do now see information mining as sideshow. Rather, their business system must incorporate gathering information, dissecting information for long haul advantage, and following up on the outcomes. In the meantime, information mining fits in with different techniques for understanding markets and clients. The key is to perceive the attention on clients and the shared trait of information crosswise over big business.
In each industry, forward looking organizations are pushing toward the objective of seeing every client independently and utilizing that understanding to make it less demanding and more gainful for the clients to work with them instead of with contenders. Same firms are figuring out how to take a gander at the estimation of every client, with the goal that they know which ones merit contributing cash and push to hang on and which one ought to be permitted to withdraw. Maybe the critical assignment of information mining is to create important example and which can be helpful for business.

4.5 **Summary Of Literature**

Value creation is basically an exchange between gaining benefits with respect to sacrifices. In business markets, some considered it as of monetarily value while others see it in bigger picture that includes non-monetary profit, such as ability to survive, market competitiveness and other social rewards. Therefore, with respect to this research value can be counted as a exchange of benefits and sacrifices between customers and supplier’s organization. Customers are considered as focal point in current situation of marketing research of industries with respect to value creation. It is because of such intense situation that only those manufacturing industriers or firms will survive or succeed who offer more value to their customers. Four major building blocks that affects the value chain of service provider are customer value, core competences, relationships and interaction (e.g. Håkansson and Johanson 1992, Parolini 1999, Kothandaraman and Wilson 2001, Helander 2004, Möller et al. 2005).
Organizations are more concerned about their customers at the attribute level, which is the lowest level of customer level hierarchy. Therefore, there are chances of missing detailed understanding regarding the consequences of particular use. Also, as there is lack of awareness of the various use situations of the customer, therefore the nuances of such situations may also be misinterpreted. We have very limited knowledge about the degree to which this information void confines capacity of organizations to make and actualize unrivaled delivery strategies of customer value. Customers' assessment regarding the dimensions of attribute value that are being delivered by the seller (and at times by the key rivals) is determined. For this purpose, qualitative survey methodology that is widely accepted is utilized by the organizations (Band 1991; Dutka 1993; Hayes 1992). For each of the key purchasing criteria characteristics, customers are requested to do their assessment of the performance delivered by the seller. Commonly, either measure of received attribute value or disconfirmation of received attribute value is chosen by the organizations, both of which are precursors to general feelings of satisfaction. As per organizations' perspective there is a good correlation among these measures and the important customer behavior like loyalty, intentions to purchase and word of mouth. This is done by converting information about customers and their tastes into knowledge which is then utilized by manufacturing companies in order to create value for customers and gain competitive advantage as well.
In the absence of knowledge, none of the company can persist. There is a need of performing day-to-day functions and to react on these knowledge based information as required. Knowledge creation and knowledge application are the base of an organization. Knowledge also varies with the changes within the organization. An organization of professional workers is highly based on the intellectual resources rather than the production ones. The extent to which knowledge is important for an organization determines the extent of capability of the organization to renew its knowledge. Particular efforts are required to ensure the presence of knowledge. Therefore, it is compulsory to ensure that there is right knowledge persisting in an organization which enhances the innovation power of the workers and the overall organization. However, knowledge management is needed.
5 EMPIRICAL FRAMEWORK FOR CREATING VALUE THROUGH EXCHANGE OF KNOWLEDGE BETWEEN CUSTOMERS AND FIRMS

5.1 ANALYSIS OF INTERVIEWS AND SURVEY

In this chapter, above discussed points will be examined through series of real time interviews and survey of case company in order to provide potential solution. Points to be focused will initially describe in series of interviews that were conducted to get enough information to proceed on and then it will be further elaborated through survey of employees from case company. In the interviews, basic ideas and suggestions for creating value and improving the processes regarding customer data collection, knowledge mining and production service were gathered through semi structured discussion. Other than that problems related to these areas were also highlighted during the interview sessions. The improvements were partially customer specific, but most of them help to improve the value creation to whole network including both customers and firms. Framework is formed with perspective to improve the customer experience and create value for the firms during that process.

5.1.1 Issues related to information exchange channel

Searching for the managerial issues and key activities, that require intense knowledge sharing for new product development, is the main focus of this analysis. Series of interviews were conducted with the ‘Sales and product development director’, who describes the main issues that case company is facing for their new development known as “Showroom”, where they display their products with all the necessary information to their customers. Other than that survey was also conducted within the employees of company in order to get the real time situation with in the company. The aim was to understand how firms manage their knowledge database and how they utilize it to develop new products and services.
In order to move forward it is necessary to understand the working of the new development known as “Showroom”. Working principle of this development is rather simple as it heavily rely on company’s customers. It is basically a platform that displays different product portfolio to the customers and through which they understand and select the product of their choice. The problem occurs when company needs to alter the product according to customers’ preferences, as there is no effective system of knowledge sharing and transferring to the design and production team. The basic working principle of ‘Showroom’ can be seen below:

![Showroom working portfolio (case company)](image)

It can be seen that working principle of “Showroom” is rather simple than complex. Customers choose the product of their choice and then it is alter according to their...
taste. Design team will have to put extra effort first while designing the product as it is and then make changes according to the customer preference. After being standardized, the product then move on to production department where it is manufactured in bulk according to the order.

In most of the interviews with ‘Sales and product development director’, he persuaded that:

"In order to keep up with the competitive environment, they have to constantly innovate and design their product portfolio accordingly. ‘Showroom’ is one of the steps towards it. This will help us to come closer to our customers and their needs."

This development is usually considered as evolutionary as it amplifies the product development radically and it needed to be more knowledge intensive for the firm which was lacking previously. Despite of the effort of providing new service through ‘Showroom’ which is indeed helpful in meeting up with constantly changing competitive environment with respect to customers, the key challenge that the case company faced was in the information and knowledge sharing and sample manufacturing. As there was no systematic approach to meet the customer requirements. It can be said that generalized process of ‘Showroom’ will impact immensely once the information and knowledge sharing efficiency improves among the customers and firms. As it was summarized by ‘Product development manager’:

"I know there exist a problem in information handling and I don’t know which department is lacking in it, but I am pretty sure that if we improve our knowledge sharing flow in this new service we will certainly be more effective and productive. It will be of great benefit if we could manage the product development process more systematically. It is somehow kind of chaotic as the production and design team are not aligned and we face difficulty in sample manufacturing on time”.

5.1.2 Managerial Issues

Service development is usually considered much different from traditional product development, with respect to both managerial and process oriented perspective. Management apparently perceived knowledge management to be autonomous when designing a new product. One can even say that the employees are innovative and perceive things on their own without any guidance. This might can produce noise in the process as every employee will feed the system with information which they think is right.

Thus concept of self actualization can be taken as both negative and positive from management point of view. Usually “self-actualized innovation” approach considered as both a negative and positive issue from the management side. Interview with ‘Sales and product development director’ also indicated the fact that system and employees in the case company are old fashioned and like to do things on their own. He stated that:

"Employees in the company are traditional minded and like to do things on their own rather than relying on system. Because of this, there is noise in the communication channel as everyone like to interpret things on their own. They don’t accept the change easily”.

This statement represents the Influence of employees on knowledge development channel and how they impact it. Management should be handling this influence through proper system and everyone should be clear about their role. However, during observation of case company’s process it was determined that organizational learning through this particular influence was not helping much even when employees have clear understanding of value chain and interest but they are unable to anticipate the future which will add more value to the firm. Self judgement is considered to be more reliable to create value than to mine knowledge from previous database. Transferring knowledge through previous learning is more suitable for the service development like ‘Showroom’ which then develop products without having delay in production line.
5.1.3 Involving Customers And Customization

All of the conducted interviews urge strongly towards ongoing process of involving customer through recently developed service known as ‘Showroom’ and there is a strong need to draw a line between interacting with customer and overkilling of it with their involvement, as it will require lot of resources and will be complex phenomenon. Even though co-creation may end up in better results in shape of product development, but can also prove to be lower financial performance due to excessive use of resources. This must be keep in mind in order to keep the situation such as facilitator benificiar rather than creator-creator.

It is also important for case company to involve the customer as a co-creator in order to perceive maximum value as they will be a lot of help in desired product design, but it must make sure it has to be done with some limit as too much involvement will create fuss. Thus, customers involvement should be done to some extent that generates effective ideas and concept. However, it was mutually considered that customers should be the one who guide the developmental process of new services, since other ways were considered to be rather futile. As ‘Product development manager’ put it as:

“Packaging companies run on their customers, and for us they are really important. ‘Showroom’ is a platform where we invite customers to look forward into our new product design and give us feedback about we can alter it according to them. This information is really important for us as it will create value for us in future”.

The main haox faced by management is the balance between standardization and customization. Larger firms tend to be more standardized rather than customization, but in this case company the platform ‘Showroom’ has been developed to display their products and customize them according to the choice of customers. This is effective their efficiency as there are very limited resources to transfer information smoothly to between all the departments. Other than that case company is not looking forward to retrieve information from their database about specific customer. Although they have this database system, but it has not being utilized properly. Ideas can be generated in many ways, ranging from customers to business partners, academic literature to non-
formal literature, events to business happenings. Mostly ideas seem to work within the working environment of firms and how employees develop themselves.

Some of the technological driven companies pointed out the fact that individual development is not always efficient as some of the knowledge workers might lack customers data regarding their taste and choice and might end up producing something that later regarded as irrelevant for them and business. This is the exact situation with case company. From previous section, it is clear that employees of case company rely heavily on their individual learning rather than doing things with system and database.

It was interesting to note that there is no effective mean to gather data regarding their customers and their previous experiences. Although, they have great understanding of their processes that create value for customers, but their sensitivity to customer services is fairly low. As it was said by their ‘Product development manager’ in the interview:

“Case company and its employees understand the processes and how to retrieve information out of them, but the respond time is too high which is why we face problems in sample manufacturing. We need to create an effective system which will bring first hand information from customers services to our notice or our design team which will proceed it accordingly. This will generate great value for us”.

Overall situation of the case company in perceiving information with respect to customers and then transform it into efficient practice is in struggling state, but there are areas of improvement. Although company has good understanding what can bring value to them, but they fail to anticipate the forthcoming scenarios which in longer run is not fruitful for the firm.

It was observed that case company works on first hand information that they receive from their customers and does not store it to any database for future use. The "Showroom" is a platform where sales team gather the information from customers and then transfer it to next team without storing that information about specific customer to their database. The need of hour is that they need a system to generate
patterns out of database of their customers. As it is stated before that concepts usually look as tools for management to get clues from customers to provide them quality products. Thereby, service concept such as ‘Showroom’ also seen as way to provide tacit knowledge since such services work as a way to transform expert knowledge into organizational knowledge in the form of information. It can also be used to manage knowledge and information in general, as new services committed to be explicitly conceptualized and explained within the working environment of the firm.

### 5.2 Framework To improve value creation

In chapter 2, different value creation approaches have been discussed and developed an initial outline of framework from figure 3, in order to improve value creation. By modifying figure 3 by adding another element, namely data storage, for exchanging and capturing information and then developing knowledge out of it.

The developed framework tries to analyze the channel to improve value creation through simple yet effective level, because utilizing too particular actions will limit the implementation of framework for different types of companies and customers using this specific framework. The aim of this framework is to present a bigger picture of the whole process that is systematically guiding and identifying the elements that will improve the value creation cycle and also help to make strategic decisions. Suggested and modified framework to create value can be seen below:
Initially in the research process, the framework with already existed phases was taken into consideration. The framework already identified the paths and principles of value creation cycle. As research reaches its maturity, new path developed in an effort to improve the value creation cycle for the case company. Data gathered through interviews and observation aided to modify the original value creation cycle. The developed framework was thoroughly revised during the timeframe of research in order to make it more understandable and fruitful. For example, lack of information sharing and storing in the value creation cycle was noted and then included in the modified framework. Series of interviews were also handy to validate the complex needs of users value processes through the experiences during the research process.

However, the new element of exchanging and storing information added in the value creation cycle needs to be open in order to understand what actually it requires and how? The modification development of the framework began by determining and analyzing different needs of customers that case company have and ways to improve value through effective meaning of information exchange between them. It further recognize the different customer value aspects in company’s business in order to develop improve value proposition for them. Conveying the measures, that are made during process of product development, to customers is also considered to be critical in order to create greater perceived value to customers and then store it in a specific system that will store that knowledge in order to avoid any noise while manufacturing products according to specific customer. This will not only help to create value for
company but also shorten the lead time in sample manufacturing step. These steps are explained in the figure below:

![Diagram of value creation cycle](image)

**Figure 11. Elaboration of Exchange and storage of information in value creation cycle.**

The first step of the process is the examination of the different segments of the customers that a company's business consists of. The reason for this examination is that segmentation is important for a better understanding of different types of customers and their needs related to the product or service they are receiving from the company (Hirvonen & Helander, 2011). The division or segmentation of the customers can be done in many styles, whatever suits the company. For instance,
segmentation can be important for companies to the improvement project which is at that time being handled or the business being referred to. For example, segmentation can be significant for different companies in different ways, like for some companies the segments are made according to the industry of the customer. While on the other hand for other companies segmentation can be done either according to the customers or according company’s product line that customers use.

The most important point in the first step is to divide the customers by looking at their different needs, making segments according to the needs of the customers. In the case of this particular organization, customer needs are connected firmly to size of the customer, development of hazard administration, diverse modules being used and industry of the client. Each of these, or a combination of them could be utilized as a premise of a change project done utilizing this system and framework.

In the second step after segmentation phase, original needs and ordinary value creation patterns of various client divisions are distinguished. This empowers an organization to completely see how value can be created with respect to case company products and services and what are the key factors that specific customer segment acknowledges or sees as need for their business (Hirvonen and Helander, 2001). The identification can be done in any way that can incite and explain fair answers from the customers of each division. Recognizing crucial and lead customers is vital with a specific end goal, which is to distinguish needs and create value that is applicable to the whole segment. The purpose of this system is to use a comparable procedure that was utilized as a part of distinguishing value creation of organization's customers and make it more understandable among employees and store it in systems for further use in future.

First of all, a general brief overview of the entire client base ought to be led to give a general picture and recognize conceivable points of interest. Furthermore, no less than one to three exceptional lead customers ought to be chosen per every client segments for the purpose of more advanced examination. These customers ought to represent to the model of the customer in that specific customer division. Thirdly, these customers should be met in a way that incites and explains the appropriate responses on specific
needs and value creation procedures most extensively. This could be, for instance, a semi-organized meeting (interview) like the interviews held as a part of this thesis, or a workshop comprising of a few distinct customers simultaneously, for instance, partitioned into discrete workshops for various customer segments.

Third step is to recognize reports and store the genuine needs of the clients and the patterns behind the value created by the supplier's product or service. The finished result is a portrayal of specific needs and value creation forms or procedures for each different customer segment. The level of abstraction can be chosen by the necessities of the change project. This stage can also recognize basic customer particular change needs as a result of the 'Showroom'.

In the fourth step, propositions and relative improvement measures are identified for each value dimension. The main purpose of the fourth step is to give comparing value propositions to the requirements or value factors that were recognized in the second stage and furthermore to shape a far reaching picture of the general value propositions that the case company offers. In addition to increasing the value creation, this information can be utilized, for instance, in making deals and during promotional activities and sales of marketing. The value propositions can be of three distinct forms: 1) value propositions that are acknowledged completely with existing item or service features, 2) value propositions that require new product or service features or different activities to be acknowledged or 3) value proposition that are somewhat acknowledged (Payne et al. 2008), however require betterment actions to achieve their maximum capacity. While framing the value propositions, it is additionally important to contrast competitors’ propositions and in order to gain competitive advantage and develop strategy accordingly.

In the fifth step, every change measure is assessed for its capability to make more value and practicality of its usage, comparatively to the way that Payne et al. (2008) assess the capability of the value creation to have competitive edge over others. The measures are additionally organized by their criticality or order of usage. The first and basic purpose of this stage is to methodically assess the capability of the measures to make more value and besides to assess to feasibility of the measures to be actualized
in relation to the cost, assets, conceivable results et cetera. The potential can be assessed by any important scale or rating and furthermore by shaping a solid portrayal of the capability of the measures and its suggestions. A specific cutoff level can likewise be characterized, which depicts the level of potential and feasibility that a measure needs to reach with the end goal for it to be really executed. After the measures to be executed have been picked, they ought to be organized by their significance or the required arrangement (sequence), if dependencies exist between measures, for instance. This helps the methodical execution of the measures in the last stage.

In the 6th step, the selected change measures are actualized methodically, and the made enhancements are communicated to the system, employees and clients in significant and relevant ways. In this step, an overall task plan to execute the changes ought to be made. The overall task plan should include the course of events of improvements to be made, dependable parties for its execution, indicators that can be measured to calculate and judge the success of the plan, the whole budget required and assets and resources plans for the measures. It is likewise critical to convey the influenced change to customers to seeing that they can be made open and popular in the public. By conveying the value creations and made changes, particularly perceived value is enhanced in addition to the received value through the real measures (Pirttila, 2016). By interacting the made improvements and making the customers’ familiar of the taken activities, additional response, proposals and new thoughts can likewise be incited and recorded from the customer base for future improvement projects.
6 CONCLUSION

6.1 INTRODUCTION & DISCUSSION

In the current competing times, the focal point of companies is on the development of products which is according to customers shifting needs. It is very demanding for the manufacturers to manage the user’s changing necessities, keeping their product portfolios innovative. An enterprise determines what value mean to their customers and identify the technological needs for the innovation that would be helpful in long run in an effort to captivate sustainability in the market. Munksgaard and Freytag (2009) states that, “the development of the innovative products opens up new doors for companies and makes their access to the new markets”. Therefore, product development is considered as a crucial process for the success of companies (Woodside and Biemans, 2005). According to Khalifa (2004), “the product attracts the customers only, if the total customer benefits surpass the sacrifices made by the customers”.

―The organizations can add more value to their customers via collaborating in spite of executing the processes individually” Chesbrough (2003). He introduced the concept of open innovation which is contemplated as the sixth generation model of innovation. It is a networking model that not only take internal ideas into account, but also equally target the external sources for information. In this way organizations gain chunk of ideas, technologies and resources to grow internally and in consequence firms can also use it as a strategic tool to come up with new opportunities at relatively lower risk.

This research inteded to introduce the customer value approach into product development process in order to introduce new product to market through knowledge intensive business service. It can also identify amount of resources and technologies throughout the product development process. Analyzing the customer value also helps to find more beneficial solutions by considering the information and knowledge exchange among both parties.
The framework proposed by this research can proved to be very fruitful for the case company. The results conducted during this research can also be very helpful in future studies or projects of similar kind. Th knowledge and experience gained through this research, provides a systematic approach to improve the business services that requires intense information sharing in order to create value.

6.2 Critical Evaluation Of Results

This thesis helps to develop understanding to a new service development for manufacturing companies with a knowledge intensive need. As the literature on new service development in manufacturing firms is really scarce and inconsistent, so it needed a boundary regarding new service development or knowledge intensive business in order to analyze it. This was not easy as the new service development is either followed up by process of product development or concluded as service businesses. Hence, research in knowledge intensive business and services halts the effort to explain service business of manufacturing firms in detail. In view of scientific contributions, this research unfolds the insight on the managerial issues and practices in an attempt to management new service development in manufacturing firms. Previous studies identifies that there is a clear need to understand new service development in better way so that it can develop and design useful managerial theories for knowledge intensive business in manufacturing firms.

This research introduces another important aspect in business management field, which is utilizing ‘Big Data’ in the organizational systems in order to identify and gain competitive edge by learning the changing patterns of customers purchasing power, taste, what they like to have in products and value perceived. Studies have been done in this particular field, for example internet of things (IOT) is being studied vastly and companies are already getting several advantages from it, but there has not been much done on the use of ‘Big Data’ in knowledge intensive business services. Although there are systems that organizations use to gather the customers data and refine knowledge out of it, but ‘Big Data’ is totally different dimension and there are developin algorithm that can be applied on systems to get knowledge out of through previous patterns and sales.
During this research, it was interesting to learn that value creation is mostly enhanced by working in collaboration and in seamless fashion. Complementary technologies and knowledge exchange deliver value to both parties. Organizations partners also play an important role in innovation, as they provide companies with necessary tools and assets in order to satisfy customers jointly. The key development of this research was to build an empirical framework that can define the path of knowledge exchange in value creation through effective and meaningful way.

From the interviews with Product development manager of the case company the overall picture of ‘Showroom’ was clear and how the case company wants to proceed in value creation through customer satisfaction via efficient information and knowledge exchange. Proceedings with the research indicated information channel and managerial issues due to which company is facing problems of lead time and sample manufacturing. Furthermore, questions and open discussion with ‘Product development manager’ shed more light on areas of improvement and issues. Path of research was decided mutually and workings proceed according to it. Interviews with Personnel of case company offered a comprehensive picture of information channel and how it can produce value for their customers through this service. Concrete improvement plans and new feature ideation were also identified through series of interviews. Information channel flow throughout this new service of ‘Showroom’ was elaborated in details. Information is rather simple than complex, but problem was in its efficiency and accuracy. Due to the noise within the channel information was either not accurate or late. Interviews also identified four major areas of improvement such as issues related to communication, information channel, sample manufacturing and lead time caused by delay in sample approval.

A framework was developed to improve created value for customer by improving the information channel and retrieve knowledge out of it. The retrieved knowledge than used in further 6 stages, which can be seen in the framework above, in order to improve case company’s service to their customer and develop product according to their taste with first-hand information. This framework provides a systematic approach to tackle all the problems and improve the working structure of the service called ‘Showroom’. This framework can also be utilized by other companies in order
to improve their service development. It tries to define different steps of product development process in quite sophisticated abstraction level. The overall presentation of the framework is rather simple, but once detailed description of each phase is done then it provides a strong suggestions and guidelines to follow up a systematic improvement setup, without maintaining too much bias on the already in practice methods or taxonomies. Due to this reason this framework is independent of the industry or company type.

Although this research has given new findings and practices for management of new services development in knowledge intensive business of manufacturing firms, but it also has the limitations. Such as:

1. Insights presented in this research should be treated as fundamental, as there is no significant research in service development in knowledge intensive manufacturing firms.
2. It also requires an additional research in order to reinforce the managerial practices and ideologies. This way it will be more reliable and refine.
3. Useage of big data in the product development process to realize the developing taste of customers.

This research was conducted to achieve two main goals: (RG1): Understanding of new service development from knowledge intensive point of view by manufacturing firms and, (RG2): searching the managerial problems and key activities to develop successful new service and innovation for manufacturing firms in the field of knowledge intensive business. Both RG1 and RG2 were achieved by focused interviews. Goals of research were presented into research questions in chapter 1. These questions were answered thoroughly through intense literature review of creating value for customers through intense information and knowledge exchange. The findings were appealing and can be utilized for the benefit of case company.

6.3 **FURTHER RESEARCH AND SUGGESTIONS**

This section discusses the further research questions that can be generated through literature of this research and then compared it with findings of this research. It is interesting to note that there is no meaningful way to measure created value. Although
there are some hypothetical model to measure it, but there is still room for improvement in it. Outsourcing is a long known concept now and recently become a great source of value for both customers and companies. It would be of further interest that how outsourcing can effect the value creation cycle, as there is not much work done on it. Individuals working in an organization are great resource of tangit knowledge and information. By time their information can also transform into tangit knowledge which is quite useful for manufacturing firms. Therefore, there is a need to understand how individuals can effect this process within in the firm.

Indeed there is a clear need to understand services related to intense knowledge and how to measure value created through this process. Furthermore, it would be interesting to note that how knowledge intensive service will behave if it is outsourced to some of the partners or competitors? It would also be interesting to assess the work done by innovative knowledge workers. In accordance to this, a research should carry on to understand the behavior of individuals, how they can be managed effectively through managerial practices.
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