SUPPLY CHAIN MANAGEMENT

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"Investigation on the Effect of Supply Chain Integration on Pakistan Retail Industry's Performance"

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ABSTRACT

In the current competitive environment firms are not only working on managing their internal affairs but also they are working on identification of other relevant factors out of the organization in order to have appropriate reaction while facing them. Supply Chain Management (SCM) has been primarily concerned with the integration of processes and activities both within and between organizations. The concept of Supply Chain Integration (SCI) is based on documented evidence that suggests that much of the waste throughout businesses is a consequence of fragmented supply chain configurations. However, there is also evidence to suggest that the achievement of higher levels of intra and inter-firm integration leads to better and improved performance. The main objective of this study is to investigate the impact of supply chain integration on performance. This study conceptualizes and develops three dimensions of SCI i.e. supplier integration, internal integration, customer integration and tests the relationship between SCI and performance. Although financial performance has been used as a key factor to measure business performance, however, numerous studies have pinpointed the limitations of financial performance which may not adequately describe firm's performance. Whereas in operational performance factors like flexibility, speed, quality, costs and competitive advantage are used to measure business performance. In this study operational performance is examined through service quality and competitive advantage, which shows other factors to measure performance of a business. In Pakistan being a developing country, retail industry can help our economy to grow further as it has much potential but the industry is not as mature as it should be. This is due to lack of effective integration between all the participants of supply chain which leads to poor performance. For this purpose quantitative research was conducted in retail firms of Islamabad and Rawalpindi with the sample size of 200. The results so obtained and compiled show that supply chain integration has positive and direct influence over performance.

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DEDICATION

To my parents, siblings, friends and teachers as they were the one who always supported me and never let me down. Thank you for all your love and support.

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CHAPTER 1

INTRODUCTION

1.1 Background

In today's competitive environment it is very much essential for organizations to have cooperative and accommodating relationships among various participants of supply chain and companies for having better results of supply chain (Tom and Cannon,1999). Due to the dynamic environment, it is very difficult to know about the conditions of market as new products are produced frequently. So it is vital for organizations to respond to these changes and focus on the strategies and process to maintain/sustain competitive position in the market (Chopra and Meindl, 2003).

In recent years many organizations are facing global competition and challenges, for this they have to integrate proper systems and processes. This competition is not only between organizations but also among the units of supply chain. So because of this trend there is a need to make an integrated system in which organizations should focus on internal factors, customers and suppliers (Jafernejad, 2006). Organizations can avail the opportunity of having complete information about the demand only when manufacturers and customers have strong relationship of trust. This will directly help the organization in such a way that less time will be required for planning and manufacturing and organizations can meet the demands of customers effectively and efficiently (Flynn, 2010).

Supply chain includes activities which are interdependent and interconnected to transform raw material into finished goods as per customer needs. Supply chain is also responsible for providing value added goods and services to meet consumer needs and only because of its effective and efficient integration among the internal activities and other contributors of supply chain (Handfield & Nichols, 1999).

Due to globalization, competition and expectations of customers have increased, which has put manufacturers in such a situation where they have to respond quickly by improving production speed and time as per demand, higher quality, reliability, flexibility and delivery on time. In order to incorporate such competencies many organizations are creating integrated supply chain strategy/system. (Calantone & Zhao, 2002). Integration of supply chain has direct impact on the effectiveness of organization and due to this

impact it has become very important and fundamental for the betterment of organizational operations. In supply chain integration two flows exist throughout the chain and organizations can't restrict themselves to any one of them. One is flow of goods and the other which has equal importance is flow of information. Supply chain integration is identified on three basic levels/dimensions: (i).Supplier integration (ii). Internal activities integration (iii).Integration with customers (Hammer and Champy 1993).

Competition among the firms has increased due to globalization and because of this trend customers have more choices and the number of alternatives have also increased. So it has become necessary for organizations to have an integrated supply chain system for not only staying ahead in competition and performance but also for survival. Supply chain integration forms a closer and stronger relationship of firms with its customers and suppliers and helps the firm to rearrange their holdings/supplies and competencies externally and internally which in result improves the performance in short-run as well as in long-run (Horvath,2001; Huo 2012). Procedures, locations, activities, actions and most importantly information when exchanged between all participants of supply chain leads to long term supportive relationships and cooperative alliances among all participants (Chen and Paulraj, 2004; Zhaoet al.,2011). In order to achieve variety of benefits to improve the performance and competencies, integrated approach has always worked. These benefits could be in terms of improved resource management, accurate delivery time, better cost management, improved risk management and providing value and innovative products and services (Lysons& Farrington, 2012).

The general view point advocates that there are some specific categories of Supply chain integration which are more active and effective in improving performance than compared to other (Frohlich and Westbrook, 2001; Flynn et al.,2010; Huo,2012). For example, if internal and external integration are compared, internal integration is more closely and strongly related to performance (Flynn et al.2010). Though there is another perspective that the effectiveness of different forms of supply chain integration is determined by other dependent factors (Wong et al., 2011b). As other dependent factors could be the demand uncertainty, product quality or innovation (Iyeret al.2009).

Incredible changes have been observed in retail sector globally. As a trend is being observed that sales are increasing in retail, players of retail industry have to change their policies and strategies according to the changing patterns of consumer behavior and preferences. Due to the changing preferences it has become a great challenge for retail players to deliver right product at right time and place.

Retail industry plays an important role in booming the economy of developing countries like Pakistan. Major focus of supply chain is to produce quality products with minimum level of lead time possible and at minimum cost of production. With the help of effective and efficient supply chain integration minimum lead time, low cost and quality products will be possible. These variables support the firms to achieve good performance and competitive advantage. Performance of retail industry is largely affected by many different factors. Supply chain integration is one of the prominent factors that have a direct impact over the performance of any organization or industry. Supply chain of retail industry is very complicated. In order to achieve better performance it is necessary to link each and every unit, so that products can be delivered on time and at lowest possible cost and time.

Pakistan's retail industry is not very old but identifying each and every unit of supply chain of retail industry and its consequences of integration on performance capability. It is a new and modern phenomenon for developing countries. This research will help to understand the effect of supply chain integration on performance with respect to retail industry and then implementing this knowledge in reality which will totally modify the concept of retail industry in Pakistan.

This research is conducted to get deeper understanding about the impact of supply chain integration on the performance with evidence to retail industry. This research will also be helpful for the managers of organizations of retail industry because through this study they can find out important and fundamental part of supply chain integration in making their performance improved and better. Thirdly this research will also be significant for the upper level management because it will help them to understand that if they have to sustain and be successful in this competitive environment, they have to integrate the core competitive strategies with supply chain integration strategy which will lead to improved

and better performance and will be helpful for staying ahead from the rest of the competition. Fourthly in this research we will also examine the impact of each dimension of supply chain integration on the dimensions of performance.

1.2 History of Retail Industry of Pakistan

Term “retail” is derived from the French word “retailer” which means “to break bulk” or to “cut a piece off”. In retailing there is direct link with customers and also the synchronization of supply chain and business activities from end to end. In other words retail industry is a sector of economy in which individuals and firms are aligned in the selling of finished products that are provided by the distributors of the companies to the end user that could be customers and consumers as well. The importance of retail sector in our economy can be determined from the data provided by Pakistan Bureau of Statistics, which has published that the contribution of retail and wholesale sector is around Rs.3.6 trillion to our economy and contributes 18% to the GDP (2011-2012).

This sector employees around 16% of its total labor force, which makes this sector second largest in employing. Due to the support of middle class, younger generation and growth of urbanization, the growth of retailing in Pakistan has increased. Also the local consumers have played an important role in making volume sales of store based, as there is an improvement in the per capita income of local consumers. In last seven years, Pakistan retail industry has gained momentum as it has witnessed the arrival of some global players like Metro which has set a new concept for local retailing market.

1.3 Problem Areas:

Retail industry is not completely saturated with variety of organizations competing with each other. This means that competition among existing firms is not that fierce making this sector profitable for the new entrants in the market. The new entrants will also have unique propositions to tap the target market and resources.

Besides all these favorable conditions, the industry is unable to perform well as it should to gain competitive advantage. This is only due to the lack of attention of the participants and activities of supply chain.

Pakistan retail sector players are also facing problems like providing minimum lead time and reduced cost to serve. As we are living in an environment where demand is uncertain and the preferences of customers rapidly change so to respond to these changing preferences retail players should be more efficient and reduce cost-to-serve. But unfortunately Pakistani retail industry players are unable to perform as required because they are unaware of the importance and benefits of supply chain integration. This is just because of lack of knowledge and in result losing their competitiveness as well as performance. For example Utility Stores Corporation of Pakistan, a venture totally owned by the government of Pakistan running a chain of retail stores, but due to lack of knowledge about supply chain integration the number of retail stores reduced to 363 in July 2005. Through this we can say that the sector is not facing infrastructural problems as government facilitates such ventures. Instead it is facing problems due to lack of information about the retail industry supply chain concept and more importantly the integration of supply chain with its effect on firm performance.

Another problem area is the format of retailing in Pakistan. Around 5% of retail penetration is organized in Pakistan. So the retail penetration of organized retail sector is low as compared to the other countries like China 20%, Malaysia 55%, Taiwan 81% and USA 85% according to a study conducted by Booz & Co consultancy. Unorganized retail sector has many limitations and lack of knowledge about the participants of different supply chain units and its integration among each unit of supply chain.

As tremendous changes have been taken place in the retail sector it is a challenge for retail players to fulfill the needs of and satisfy consumer. Problems with the upstream flow could be lack of information sharing, trust and short term relations with suppliers which leads less sales and poor performance. Downstream problems include lack of availability of right product at right time which will ultimately lead to losing customers.

In order to solve all the above problems faced by retail sector of Pakistan, supply chain integration can be considered as a source of improvement and development. Secondly a need occurs to examine and study its effect on the performance of organization.

1.4 Objective of Research:

The main objective of this research is to examine the effect of supply chain integration on performance of retail industry of Pakistan. The research also aims at recommending ways for improvement in supply chain integration and performance of the retail industry.

1.5 Significance of the Research:

In improving the economy of countries especially of developing countries, retail industries are playing an important role. Retail industry of Pakistan has the potential to grow as there are many opportunities for the national and international retailers to penetrate in an organized manner which will help in the economic growth of the country. Besides this, retail sector is the country's the country's second largest employer but unfortunately due to poor performance of the industry, retail sector has become problem for the economy to flourish. Respective research will be significant for the retail firms management, as it will guide them in improving their performance and due to this improved performance, industry players can be able to contribute their part in the economic growth of the country.

Moreover, the research done on retail industry are linked with the quality and customer satisfaction or other interconnected dimensions, but unfortunately inadequate research is present on supply chain integration and its influence on performance. For improved or better performance supply chain integration has become significant tool for retail industry and this in result will help firms to achieve advantage over others.

Through this research it will help industry to accelerate and recover its performance by supply chain integration. Hence, it is set to believe that this research can contribute in retail sector of Pakistan by figuring out that how much supply chain integration impacts the performance. Relevant recommendations will also be provided with accordance to Pakistani retail industry context, which can further enhance the condition of industry.

1.6 Scope of Research

The scope of this study is to investigate the effects of supply chain integration on performance with respect to retail industry of Pakistan. Supply chain integration concept

is examined through following dimension i).Suppliers integration ii).Customer integration and iii).internal integration. On the other side performance is examined through these dimensions which are service quality and competitive advantage.

1.7 Research Questions

- Does supply chain integration affect the performance?
- What is the impact of dimensions of supply chain integration on service quality?
- What is the impact of dimensions of supply chain integration on competitive advantage?

CHAPTER 2

LITERATURE REVIEW

2.1 Supply Chain

Supply chain plays a significant part in transforming the raw material in to final product. It also serves as the linkage between the supported activities of transformation process (Rosenzweig et al 2003).

Christopher (1998) has explained the supply chain as set of activities that are required for forming linkage for forward and backward activities. This linkage enables to convert the raw material into final product and ensure their efficient delivery to the targeted customers. Supply chain comprises of two or more organizations and is directly liable for the flow of material, information, finances, products and services from that of suppliers to the end users of products (Mentzer et al 2001).

2.2 Supply Chain Management

Earlier than this competitive dynamic, organizations tend to consider themselves as interdependent entity. For surviving the market dynamics they tend to operate as independent units. The current scenario on the other hand has shifted the trend as organizations now know that they cannot survive alone. Supply chain enables the flow of material, finance and information from that of the supplier to the end users. Hence such a flow is managed and controlled via supply chain management (G. S. 1989).

Supply chain management is kind of a partnership and this partnership enables organizations to perform cohesive efforts thus to provide end users with goods of their demand. (Lisa M. and Martha C. Cooper 1990). It channels the coherence between the activities of supply chain participants (Roberts, 2003). It is a challenging task to incorporate and implement the Supply chain management framework. The commitment of resources is strongly required for implementation of the framework of supply chain management in an organization. To fulfill this purpose all of the entities are required to work in a coordinated manner and therefore are required to formulate strategies through mutual consensus.

The foremost aim of the organization operation is to provide the end user with the correct product in timely manner. It is only possible when the continuous and coordinated activities of supply chain members are made practical (Damien Power,2005). The

Continues process of supply chain management incorporates such activities, operations and functions that are liable for efficient flow of products (Stevens, G.C.,1990).

The process function of supply chain is significantly different from that of the traditional supply chain factors and activities. In process function approach of supply chain management, all of the functions are based on the development of products and services as per customers' needs and demands. The purpose of organizations is to move around all such process (Coopers and Ell ram, 1987).

Lambert at al (2000) has explained the number of such process that comprise of customers relationship management, product demand management and product development. It is responsibility of supply chain management to create the competitive advantage over those of the competitors at the market place. Hence with this competitive advantage customer satisfaction can be enhanced. Thus Customer's satisfaction further leads to the customer's loyalty. The loyalties of customers lead to the repeat purchases that ultimately lead to the organizational profitability and better performance (Mentzer et a., 1993; Monczka et al., 1998; Global Logistics Research Team at Michigan State University, 1995).

2.3 Supply Chain Management in Retail Industry

Significant amount of studies related to supply chain management of various industries have been conducted but very limited researches have been examined on supply chain management of retail industry. In the concept of supply chain management, retailing is a process in which economic value is transferred to the end users that could be consumers or customers through a proper channel. This channel includes the flow of physical products and services and required information from manufacturer to the end user (Levy, M & Weitz, B.A., 2007). The strength of supply chain management is its ability to incorporate the end user as a member in providing the goods and services delivered through a supply chain.

Due to advancement in the concept of supply chain management, new and modern economic activities are emerging and according to the new concept it is set to believe that retailers are considered to be a part of whole supply chain and play an active role in

organizing, planning and managing the activities of supply chain, retailers are required to show balance act while achieving numerous needs. Activities performed by the players of retail industry should efficiently and effectively manage and conduct them at right time, without lacking in quality and satisfied customer and maintaining low cost. Effective and efficient supply chain management provides great advantages to retailers in terms of reduced operating cost and inventories, satisfied customer and availability of products (RCG University 1999).

The main objective of implementing the concept of supply chain management is to align the objectives of functional area with the objectives of other participants of supply chain to achieve better performance and satisfy end users. If the objective is not achieved it will lead to bear more cost and the efforts put in will become useless (Lee, H.L., Billington, C. 1992). So it is important for the players of retail industry to understand the abilities and importance of participants of supply chain, in order to maintain and operate supply chain effectively to get most of the profit and better performance.

Due to market volatility and technological advancements, players of retail industry cannot restrict themselves on their own operational activities; instead they have to work with other participants of supply chain to get maximum out of it (Dunne, M & Lusch, R., 2005). The players of retail industry have a unique and most important position, as they gather information about the purchases of customer by customer's transaction and keep everyone aware about the trends in market. Through this information a new phenomenon developed that is Quick response. This new strategy helps to utilize the information flow and share with other participants of chain which directly enhances the performance and increase customer satisfaction (Levy, M & Weitz, B.A, 2007).

There are numerous reasons behind conducting this research on supply chain management in retail industry. One of the main reasons is to investigate that how much organizations can gain better performance by implementing supply chain. Supply chain management is very significant for better performance of retail industry. Networking and collaboration is very important as well as superior priority for the firms of retail industry.

2.4 Overview of Pakistan's Retail Industry

Retail industry of Pakistan is playing an important role in the strengthening country's economy. Pakistan's retail industry is unique and typically unorganized. It is placed as third largest after agriculture and manufacturing industry. Retail trade contributes 17.5%of its share in GDP and around 34% to the service industry. Retail industry employees around 16% of Pakistan's total labor force and are second largest industry to employee.

Retail industry of Pakistan has a great potential to steer the economy growth of the country through expansion of services. Thus, retail sector is very important for the development of Pakistan economy as it carries immense potential.

2.5 Supply Chain Integration

As every aspect of business is getting matured day by day, supply chain which is one of the core aspect of business is also getting mature day by day and due to this the complexity also increases. Employees of firms are asked to increase productivity, bring efficiency in operations and improve customer service. Due to this result, interaction between firms should increase in supply chain and closer relationships and collaboration is required to make sure that the flow of resources, materials, products, payments, information works effectively and efficiently (Flynn, Huo & Zhao, 2010; Frohlich & West brook, 2001; Thun 2010 & Wagner, 2003). To build and maintain these relationships it is required to share information operational activities and coordinated at desired level for cross-functional process and has close and trustworthy partnerships (Charvet2008, Lambert 7 Cooper 2000; Rai, Patnayakuni & Seth, 2006; Sanders, 2007).In earlier researches it has been agreed upon by many researchers that supply chain integration is a modern phenomenon and has revolutionized the concept of supply chain management.

Supply chain integration, the term has been described as the level of collaboration and coordination among the internal operations of organization and the participants of supply chain which include suppliers and customers (Flynn et al., 2010; Frohlich, 2002).

Stank, Keller & Daughertry (2001) describes supply chain collaboration and Carr, Kaynak & Muthusamy (2008) describes supply chain coordination as basic components of supply chain integration. Supply chain integration is the strength to link the processes and activities of supply chain of a firm. Integration of information, operational and relational activities helps and facilitates these linkages in supply chain activities of firm (Mackelprang, Robinson & Webb, 2012).

By implementing supply chain integration organizations can make better and closer relationships with other channel participants. Through this, organizations can effectively respond to market instability, technological changes and volatility. In result supply chain integration lead firms in route to develop better synchronized procedures and actions (Rosenzweig, 2009).

Supply chain integration describes that at every level of organization; goals of functional region are synchronized and aligned with the goals of other participants of supply chain. This alignment and synchronization of goals will help the participants of supply chain to provide and deliver best and value added products as well as services to the end user (Pagell, 2004).

Supply chain integration also helps in creating new opportunities and facilities for the enrichment of firm's profit. It also helps organizations to rearrange their resources and competencies externally and internally to combine their supply chain as a whole with respect to improve performance (Horvath, 2001; Huo, 2012). If participants of supply chain are working in such environment where transparent information is not shared, it may be possible that it will make unable to obtain real outcomes of supply chain management (Lee,2010). So it is very important to work in an environment where information is shared across the supply chain participants which provides the base for supply chain integration (Lee & Whang, 2004)

The primary function of supply chain integration is to achieve well planned and appropriate movement of raw materials, information, product services and payments throughout the supply chain network (Flynn et al. 2010). Supply chain integration

benefits the business operation to run smoothly as well as assists to reduce physical boundaries among the system of supply chain (Romano, 2003).

To enhance the overall strength and performance of the firm, it is important to integrate all supply chain entities (K.Petrson & L.Ceccer, e 2001). According to Bgach et al 2005 supply chain integration is helps to develop a mechanism in which it is possible to make strategic alliance among supply chain participants. Secondly it has benefited in making synchronization between day to day, short term and long term decisions. With the help of strategic alliance among all supply chain participants, supply chain integration has helped in providing a mechanism for proper and aligned planning at various stages in supply chain. This proper and aligned planning helps to achieve operational as well as strategic efficiency which is beneficial for all the entities in supply chain in terms of improved performance and profitability (Sanders, 2008).

Implementation of supply chain integration helps to improve as well as increase the strength and performance of the organizations. Well-organized planning, flow of information and materials, goals alignment and achieving those goals and objectives on time is only possible when supply chain is integrated among all the participants (Ross, 2011).

In supply chain integration two aspects are very important towards the participants of supply chain and that is information and resource sharing. If we look up to the concept of supply chain integration, it is not only responsible to maintain or manage the flow of products or service to the end customer or consumer but also responsible for the flow of information. It is important to incorporate both aspects that are information and resource and organizations cannot bound themselves to only one of them.

So in order to increase efficiency of supply chain integration and improve performance of the firm, all entities of supply chain should have coordination and collaboration (Prajogo & Olhager, 2012). Many researchers have investigated supply chain integration with different dimensions with respect to their issue. As Steven 1989 categorized supply chain integration into three basic levels which includes internal integration, external integration and functional integration. Further study on external integration has been examined and

two main areas are focused and that are customer integration and supplier integration impact on the performance (Frohlich & Westbrook, 2001). Chen and Poulraj (2004) examined information integration, logistics integration and long term relationships impact on the performance. So in this study internal, supplier and customer integration will be examined with respect to performance.

2.6.1 Integration with Supplier

The supplier's integration states about the partnership and association of the organizations to those of the key suppliers of the organizations. By the suppliers integration process at place the organizations would tend to take input from the suppliers in order to develop the organizational processes, policies and strategies. The supplier's integration is so significant for developing the products and services as per customer's requirements and wants (Flynn et al., 2010).

After the information is being shared to the suppliers both of the parties tend to work in harmony in order to make processes run effectively and efficiently. The coordinated activities that take place among the supplier and organizations and it came out as the outcome of integration with suppliers (Zhao et al., 2011).

Organizations are moving towards the practice of involving their suppliers into processes. Suppliers act as partners in development of organizational internal processes. Supplier's integration with organization provides number of benefits to organization. These benefits include rapid time to market of new product as compare to competitors' increases in quality of product, decrease in total cost of production consistency in efficient delivery of products to end customers (Wagner, 2003).

Prajogo & olhager (2012) has conducted a study and found out that for the recent years the relationship of that of the organizations to their suppliers have been altered significantly. The organizations tend to get engaged in strategic alliances to their important suppliers. The following three dimensions have been changed significantly.

i. Organizations are heart-rending towards the development of far sighted relationship with their suppliers as compared to forming the short term relationship.

ii. Now the organizations have shifted their focus of developing and thus retaining the long term relationships with few suppliers rather than keeping a larger pool of suppliers.

iii. Now the partnerships are being made with the suppliers at strategic level and they are considered as an essential part of organizational operations.

The organizations are engaged in building and strengthening the relationships with their suppliers as they have now realized that working alone without any collaboration or in isolation is not going to help them in gaining their goals and objectives. The supplier organization collaboration is accomplished in most cases by building the buyer and seller relationships (Cheng, 2011). The integration with those of key suppliers is much crucial in order to get smooth functioning of the organizational operations. In case if the organizations are not able to successfully form the effective and long run relationship to their key suppliers then it would outcome in the ineffective and inefficient flow of merchandise and the products along with the whole the supply chain (Hand field and Nichols, 1999).

In case of organizations making decisions for developing the long term associations with their suppliers then it would outcome in the betterment of the product delivery to the end customers (Das et al., 2006).

For developing the robust partnership relationship with suppliers both the parties require to build great trust on each other. In order to keep this partnership both the parties also required to express the commitment to each other's resources and operations (Spekman et al., 1998).

The integration with that of the key suppliers has a greater positive impact on the organizational operational performance (B. Flynn et al., 2010). Trait (1998) has explored that the integration with those of the suppliers tend to have a positive effect on the financial performance of the organization. For increasing customers' satisfaction and in order to gain competitive advantage this collaboration with key suppliers is of immense importance.

2.6.2 Internal Integration

Asif (2010) has described the internal integration as a collaboration process among the different internal functions. For achieving the customer's satisfaction organizations are required to have inward flow of those inputs to the products and then outward flow of such products to that of the end users and customers.

The internal integration states that the level of coordination that exists among the organizational processes, values, and those of strategies. The organizations need to deliver products as per the needs of the customers (Chen and Paolraj, 2004).

The information can be well shared across the functional areas in the organization by arranging the meetings. The meetings can be arranged on issues like causes of operational delays and strategies for delivering product at the right time (Yeung et al., 2009). Process harmonization can be gained through developing the cross departmental teams for assignments and projects. These cross functional teams can assist the different departments in working together for achieving the effectiveness and efficiency of internal work processes (Koufteros et al., 2005).

2.6.3 Integration with Customers

Customer's integration is referred to as the partnership among organizations with those of key organizational customers. With the help of this customers integration organizations gather feedback from those of the customers regarding the development of organizational processes, policies, product strategies and organizational behaviors. Customer's integration is of immense importance for developing the products and services as per the needs and wants of the customers (Zaho et al., 2011).

The information that is being gathered by the customers plays a key part for the organization in order to understand the environmental trends and changing customers' wants. The customers integration serves as a two way process, as in it the role of the organization is to share the information about inventory process , technology factors and the new product availability to those of the customers and in return the customers provide organization with their feedback and recommendations for the improvement in the

products and services of organizations. The Customer's integration is of immense importance for the successful operations of firm (Mentzer, 2004).

In process of customers integration the organizations tend to diffuse the products and services deep in to the customers unit and with such diffusion process the organizations become able getting the information regarding the culture, values and preferences of the customers. This information helps the organizations to produce effective and efficient product and deliver according to those of the customer's wants and needs. With the help of such information flow organizations become able to provide the targeted customers with those products and services that tend to be differ from customer view of the supply chain to that of the organizations and the suppliers (Kastro, 2006).

The integration process of Supply chain is just not liable for the provision of such products and services that satisfies the customer expectations and needs. But it also gives the complete solution for the customers by the interactive support services (Kasrda, 1997).

2.7 Performance

Organizations are able to gain better performance when their respective customers believe that the services or products provided by the organization are different, improved and better as compared to competitors. Organizations are able to maintain and sustain their better performance by delivering unique value to its end users. Performance of a firm can be measured in two ways which includes financial performance and operational performance. Both studies can be adopted to measure the benefits from supply chain integration. Although financial performance has been used as a key factor to measure business performance, however, numerous studies have pinpointed the limitations of financial performance which may not adequately describe firm's performance. Whereas in operational performance factors like flexibility, speed, quality, costs and competitive advantage are used to measure business performance. In this study operational performance is examined through service quality and competitive advantage.

Organizations can improve their performances by giving high quality services or products, on time delivery that means at the right time and right place to the end user.

Performance of a service industry can be evaluated by the service quality provided by the service providers and the competitive advantage service providers are having over their competitors. High service quality is the main factor for competing in a competitive environment and leads to improve and better performance.

Whereas effective and efficient supply chain integration has become a possibly valued method to achieve competitive advantage, as the competition is not among the firms performance it's between supply chains. Suhong et al 2004, investigated the influence of supply chain integration over firms performance and competitive advantage. Findings show that greater level of supply chain integration helps to achieve better and improved performance as well as better competitive advantage. Similarly competitive advantage has constructive and direct impact on performance.

2.8 Impact of Supply Chain Integration on Performance

Many researches have conducted studies on the impact of supply chain integration and performance. A number of studies conducted by various researchers have concluded that supply chain integration has a positive impact on performance or in other words as integration level is high the more organization leads better performance (Gimenez and Ventura, 2005; Stock et al. 1998). Three main level of integration which includes customer integration, supplier integration and internal integration were examined while evaluating the effect of supply chain integration on performance. Another study conducted in China shows an evidence of relationship between firm performance and supply chain integration in service firms. Study resulted that a strong and close link or relationship exists between the supply chain integration and firm performance (Liu et al.2013)

Some researchers have examined the study of supply chain integration with different dimensions with respect to performance. Sheu et al 2006 investigated the effect of supply chain integration on the performance of organizations with respect to different industries. Sheu investigated supplier's integration in Taiwan and presented a model that stated information integration, long term relations, and logistic integration as dimensions.

Results of their research show that supplier integration has positive relationship with performance.

Baharanchi 2009 examined the impact of supply chain integration on performance of organizations. Three level of integration have been characterized in the study which includes internal, suppliers and customer integration. Performance has been evaluated by service quality and competitive advantage. Findings of this study show that supply chain integration has positive impact over the performance of organizations.

Some challenges and problems of supply chain integration with respect to performance were recognized by Glaser-Segura et al., 2006. A recent study conducted which investigated supply chain integration over performance and findings show that higher level of supply chain integration does not leads to better or improved performance and the dimensions of supply chain integration have limited or no considerable effect over some dimensions of performance (Fabbe-Costes and Jahre, 2008).

All of this literature will help us to conduct an empirical investigation on the impact of dimensions of supply chain integration which includes internal, suppliers and customer integration on service quality and competitive advantage with respect to retail industry of Pakistan. The research conducted will relate supply chain integration to performance and will also support supply chain decisions for firm's improved and successful performance through informative knowledge.

CHAPTER 3

METHODOLOGY

3.1 Theoretical Framework

Independent variable | Dependent variable

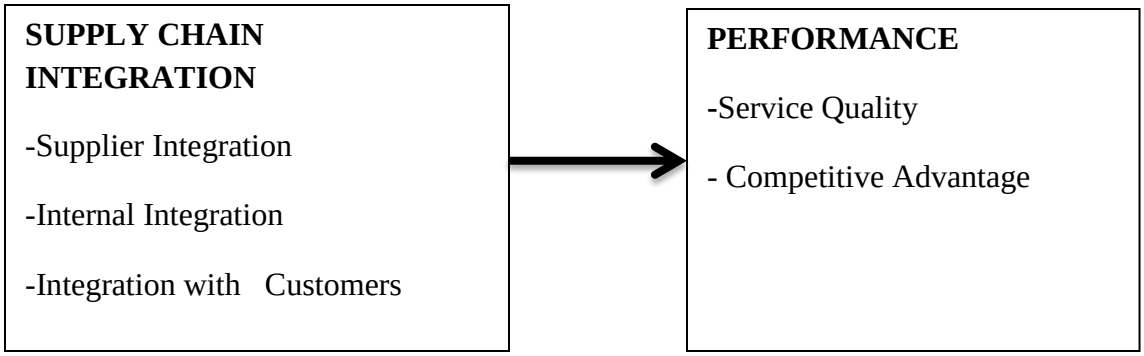

Figure 1: 3.1

Above framework shows that supply chain integration is independent variable comprising three dimensions of which includes supplier, internal and customer integration. Whereas performance is dependent variable including service quality and competitive advantage as its dimension. So, in this study we will try to find out the effect of supply chain integration on the performance and then try to find out the relationship between them.

3.2 Hypothesis

H1: Supply chain integration positively effects performance

We hypothesize that higher level of supply chain integration will increase and positively effects performance. As by implementing supply chain integration we want to check the positive effect on firm's performance.

H_0: Supply chain integration negatively effects performance

H2a: Suppliers integration positively effects service quality.

$H_0$2a: Suppliers integration negatively effects service quality

H2b: Internal integration positively effects service quality.

$H_0$2b: Internal integration negatively effects service quality.

H2c: Customer integration positively effects service quality.

$H_0$2c: Customer integration negatively effects service quality.

H3a: Suppliers integration positively effects competitive advantage.

$H_0$3a: Suppliers integration negatively effects competitive advantage.

H3b: Internal integration positively effects competitive advantage.

$H_0$3b: Internal integration negatively effects competitive advantage.

H3c: Customer integration positively effects competitive advantage.

$H_0$3c: Customer integration negatively effects competitive advantage.

3.3 Research Methodology and Design

Methodology is organized and systematic procedure through which we intend to conduct our research. This chapter shows the type of methodology we have used in this research. The overall investigation is to find the effect supply chain integration on the performance of retail industry in Pakistan. In order to investigate the problem we have used a set of questions which was filled by the respondents. Quantitative study was conducted for this purpose, as primary data is very significant to every study. So a set of questions with five likert scale was developed and distributed among respondents of retail industry. Likert scale consisted of following scale 1= strongly disagree 2= disagree 3=Neutral 4= Agree and 5= strongly agree.

3.4 Population

The focus of this research is on the retail industry of Pakistan. So the retailers are the population of the respective research. In Pakistan there are so many retail store which sell FMCG products to end users. Retail sector includes all big retail stores as well as super stores and departmental stores.

3.5 Sample & Sampling Technique

For this research two cities were selected Islamabad and Rawalpindi. Sample of 200 retailers were selected across Islamabad and Rawalpindi which contain 100 samples from Islamabad and 100 from Rawalpindi. All the retail stores were selected randomly in the research and secondly who were willing to participate in the respective research. Respondents included the employees and managers of retail stores.

3.6 Research Instrument

In this study five variables are studied which includes supplier integration, internal integration, customer integration, service quality and competitive advantage. Each of the variables has separate set of questions. A set of 24 questions were used to measure and evaluate the variables. All the questions are made on likert scale.

3.7 Procedure

In order to investigate the hypothesis statements and determine the effect of supply chain integration with respect to suppliers, internal and customer integration on the performance the tool used for the data analysis will be SPSS. It is one of very effective and efficient tool for analyzing the data. Secondly it helps to get accelerated analysis of data and generate results.

3.8 Data Collection

For the data collection structured closed ended questionnaire was designed to gather the data. It comprises of questions consisting pre-defined parameters to solution. Data was collected by handing over the printed questionnaire to the respondents in each city.

3.9 Ethical Issues

While conducting any type of research it is important to consider some ethical issues which are require to be mentioned. It is important that respondents should fill questionnaire according to his or her own consent have some sort of competence to preserve an action. Secondly the respondent must know and understand the purpose of the study. If any respondent is willing to take part in the study, it must be encouraged and can quit from study whenever if they want. Thirdly, no harm can be imposed on

respondent whether is physically or mentally. Fourthly it very important to keep the privacy of the respondent's view and position. As it a very significant aspect of ethics.

CHAPTER 4

DATA ANALYSIS

4.1 Preamble

This chapter enlightens about the procedure and all the tools used in the study. Analysis and investigation of the data is about the procedures and results of each proposed hypothesis. This chapter endorses the validity and reliability of the model. Additionally this chapter also confirms the proposed relationship among all the constructs of the current study.

4.2 Analytical Procedure

For all data file preparation and different tests SPSS Version 20 was used. Different tests were run like Reliability, Regression, Correlation, Anova, Pie charts, Mean, Median and Mode.

4.3 Preliminary Data Screening

This process data checking starts with some initial tests that are essential for screening of data such as checking missing values, abnormal or aberrant values, normality and descriptive statistics.

4.4 Missing Value Analysis

Data analysis process starts with missing value analysis. In this analysis we try to find out any value that is missing. Presence of missing value leads towards incorrect results. Mean substitution method is used to replace these missing values. By applying this missing value analysis we see that no value is missing in our data of 200 cases.

4.5 Aberrant Values

Values that don lie in five likert scale are known as aberrant values. This method can be used to clerical mistake while entering data, to deal with such values a variable is created with the name of aberrant to figure the value greater than 5 and less than 1. No value outside the range was falling in our data.

4.6 Reliability Analysis

To check stability as well as reliability of the data, reliability test is conducted by examining the reliability coefficient that is Cronbach's alpha. The criteria in general is

that the reliabilities that are greater than .80 are the ones that have excellent stability and are highly significant, those which are less than .60 are considered to be poor and those which fall in .70 are considered to be suitable or moderate. Following is the reliability analysis showing reliability of questionnaire.

4.6.1 Supplier Integration

Reliability Statistics

Cronbach's Alpha	N of Items
.906	5

Table 1: 4.6.1

The above table shows reliability of the variable supplier integration. 5 items of supplier integration are being taken and Cronbach's alpha in this case is .906. Hence we can say that reliability of the variable is highly significant and acceptable.

4.6.2 Internal Integration

Reliability Statistics

Cronbach's Alpha	N of Items
.846	5

Table 2: 4.6.2

The above table shows reliability of the variable internal integration. 5 items of internal integration are being taken and Cronbach's alpha in this case is .846. Hence we can say that reliability of the variable is highly significant and acceptable.

4.6.3 Customer Integration

Reliability Statistics

Cronbach's Alpha	N of Items
.810	5

Table 3: 4.6.3

The above table shows reliability of the variable customer integration. 5 items of customer integration are being taken and Cronbach's alpha in this case is .810. Hence we can say that reliability of the variable is highly significant and acceptable.

4.6.4 Service Quality

Reliability Statistics

Cronbach's Alpha	N of Items
.738	5

Table 4: 4.6.4

The above table shows reliability of the variable service quality. 5 items of service quality are being taken and Cronbach's alpha in this case is .738. Hence we can say that reliability of the variable is moderately significant and is acceptable.

4.6.5 Competitive Advantage

Reliability Statistics

Cronbach's Alpha	N of Items
.788	4

Table 5: 4.6.5

The above table shows reliability of the variable competitive advantage. 4 items of competitive advantage are being taken and Cronbach's alpha in this case is .788. Hence we can say that reliability of the variable is moderately significant and is acceptable.

4.7 General Discussion about Questions

Detail analysis of each and every question is as following:

Q1: You and your supplier share information with each other?

Statistics		
You and your supplier share information with each other		
N	**No table of figures entries found.**Valid	200
	Missing	0
Mean		3.42
Median		4.00
Mode		4

Table 6: 4.7.1.1

Descriptive analysis as depicted in the table above shows the mean value of sharing information between organization and suppliers is 3.42. It shows that an average with which organizations and suppliers share information with each other is 342%.Mode is 4 which mean that 4 is the number that frequently occurs. As the value 4 indicates agree on five point likert scale which shows that mostly participants agree that they have integration with suppliers with respect to sharing valuable information on time. Middle value in this case is 4.

You and your supplier share information with each other					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	28	14.0	14.0	14.0
	Disagree	20	10.0	10.0	24.0
	Neutral	29	14.5	14.5	38.5
	Agree	87	43.5	43.5	82.0
	Strongly Agree	36	18.0	18.0	100.0
	Total	200	100.0	100.0	

Table 7: 4.7.1.2

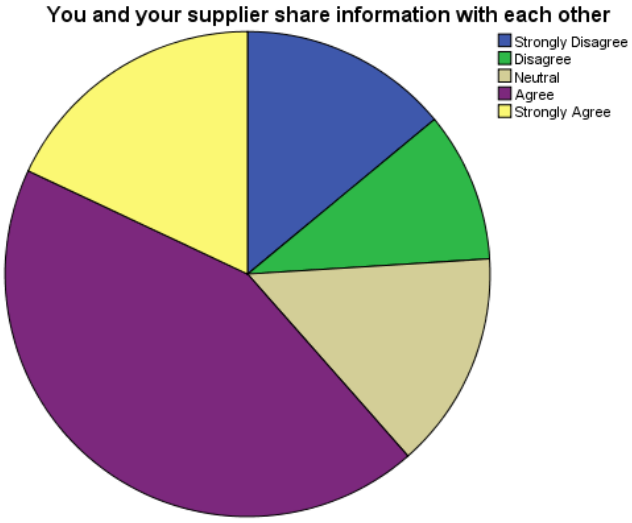

Figure 2: 4.7.1

The aim of this question was to find out how much valuable information is been shared between the organization and suppliers. Out of 200 respondents 14% of them strongly disagree while 10% don't agree that they and their suppliers don't share information with each other. Whereas 14.5% of the total respondents gave neutral response as they were not certain about their opinion regarding information sharing. However 43.5% of the

sample size agreed and 18% strongly agreed that valuable information is been shared by them and their suppliers. This indicates that 61.5% of sample size believes that they have vital and effective communication with their respective suppliers.

Q2: You and suppliers actively participate with each other in procurement process

Statistics		
You and suppliers actively participate with each other in procurement process		
N	Valid	200
	Missing	0
Mean		3.39
Median		4.00
Mode		4

Table 8: 4.7.2.1

Descriptive analysis as depicted in the table above shows the mean value of participation of supplier in the procurement process is 3.39. It shows that an average with which the participation of suppliers in the process of procurement is 339%.Mode is 4 which mean that 4 is the number that frequently occurs. As the value 4 indicates agree on five point likert scale which shows that mostly participants agree that their respective suppliers play a significant role in the procurement process. Middle value in this case is 4.

You and suppliers actively participate with each other in procurement process					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	28	14.0	14.0	14.0
	Disagree	12	6.0	6.0	20.0
	Neutral	39	19.5	19.5	39.5
	Agree	96	48.0	48.0	87.5
	Strongly Agree	25	12.5	12.5	100.0
	Total	200	100.0	100.0	

Table 9: 4.7.2.1

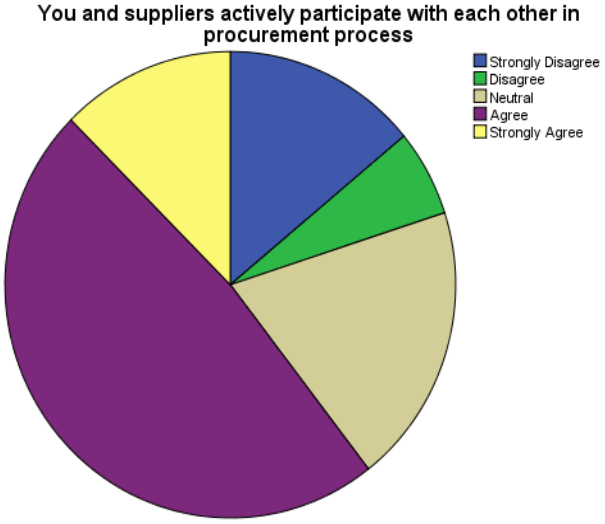

Figure 3: 4.7.2

The aim of this question was to find out that weather suppliers play an important role in the procurement process or not. Out of 200 respondents 14% of them strongly disagree while 6% don't agree that they and their suppliers don't participate actively in the procurement process. Whereas 19.5% of the total respondents gave neutral response as they were not certain about their opinion regarding participation of suppliers in the procurement process. However 48% of the sample size agreed and 12.5% strongly agreed that in the procurement process respondents and their respective suppliers participate actively. This indicates that 60.5% of sample size believes that they and their suppliers

actively participate in the process of procurement. Secondly it also means that transparent information is shared about their inventory and procuring process with their respective suppliers.

Q3: You have effective communications with your supplier on new changing trends

Statistics		
You have effective communications with your supplier on new changing trends		
N	Valid	200
	Missing	0
Mean		3.27
Median		4.00
Mode		4

Table 10: 4.7.3.1

Descriptive analysis as depicted in the table above shows the mean value of sharing information and have effective communication between organization and suppliers about changing trend in the market is 3.27. It shows that an average with which organizations and suppliers share information and have effective communication about the new and emerging trends in the market is 327%.Mode is 4 which mean that 4 is the number that frequently occurs. As the value 4 indicates agree on five point likert scale which shows that mostly participants agree that they have integration with suppliers with respect to sharing valuable information about the new trends to keep themselves updated. Middle value in this case is 4.

You have effective communications with your supplier on new changing trends					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	20	10.0	10.0	10.0
	Disagree	32	16.0	16.0	26.0
	Neutral	47	23.5	23.5	49.5
	Agree	77	38.5	38.5	88.0
	Strongly Agree	24	12.0	12.0	100.0
	Total	200	100.0	100.0	

Table 11: 4.7.3.2

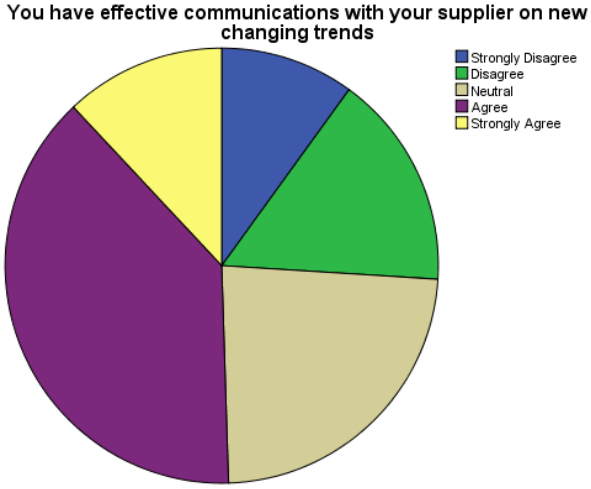

Figure 4: 4.7.3

The aim of this question was to find out that weather the respondents have effective communication with their suppliers on changing or new emerging trends or not. Out of 200 respondents 10% of them strongly disagree while 16% don't agree that they and their suppliers don't have effective communication on new changing trends. Whereas 23.5% of the total respondents gave neutral response as they were not certain about their opinion regarding effective communication with suppliers about new trends. However 38.5% of the sample size agreed and 12% strongly agreed that they have effective communication with their respective suppliers on new and changing trend. This indicates that 50.5% of sample size believes that they and their suppliers have effective communication on new

or changing trends which helps them to run their operations smoothly and collaborate with each other effectively and efficiently.

Q4: You and your supplier use information technology for information sharing

Statistics		
You and your supplier use information technology for information sharing		
N	Valid	200
	Missing	0
Mean		3.31
Median		4.00
Mode		4

Table 12: 4.7.4.1

Descriptive analysis as depicted in the table above shows the mean value of sharing information through information technology between organization and suppliers is 3.31. It shows that an average with which organizations and suppliers share information with each other through information technology is 331%.Mode is 4 which mean that 4 is the number that frequently occurs. As the value 4 indicates agree on five point likert scale which shows that mostly participants agree that they share information with their respective suppliers through information technology on time. Middle value in this case is 4.

You and your supplier use information technology for information sharing					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	11	5.5	5.5	5.5
	Disagree	43	21.5	21.5	27.0
	Neutral	30	15.0	15.0	42.0
	Agree	105	52.5	52.5	94.5
	Strongly Agree	11	5.5	5.5	100.0
	Total	200	100.0	100.0	

Table 13: 4.7.4.2

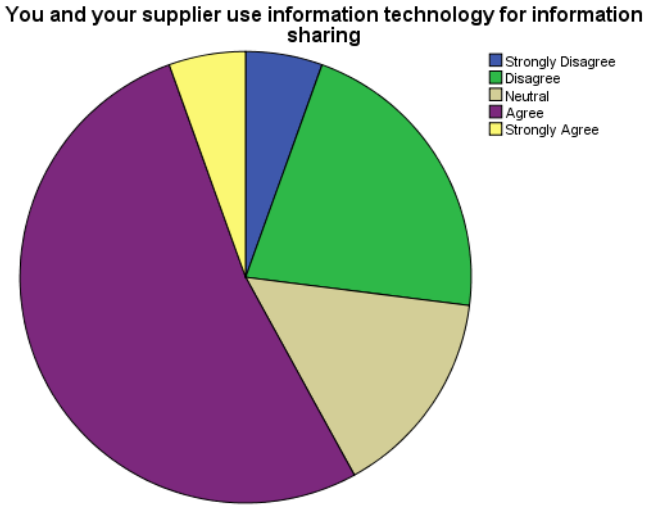

Figure 5: 4.7.4

The aim of this question was to find out that weather the respondents and suppliers use information technology as a tool to share information or not. Out of 200 respondents 5.5% of them strongly disagree while 21.5% don't agree that they and their suppliers don't use information technology as a tool to share information among them. This shows that 27% of the sample size believes that they don't use information technology as a tool to share information. Whereas 15% of the total respondents gave neutral response as they were not certain about their opinion regarding the use of information technology as a

tool for effective communication with suppliers. However 52.5% of the sample size agreed and 5.5% strongly agreed that they have effective communication with their respective suppliers using information technology as their tool to share valuable information. This indicates that 58% of sample size believes that they and their suppliers have effective communication by using information technology as a tool to share valid information.

Q5: You have long-term relationships with your suppliers

Statistics		
You have long-term relationships with your supplier		
N	Valid	200
	Missing	0
Mean		3.49
Median		4.00
Mode		4

Table 14: 4.7.5.1

Descriptive analysis as depicted in the table above shows the mean value of having long term relationship between organization and suppliers is 3.49. It shows that an average with which organizations and suppliers have long term relationships with each other is 349%.Mode is 4 which mean that 4 is the number that frequently occurs. As the value 4 indicates agree on five point likert scale which shows that mostly participants agree that they have long term relationships with their respective suppliers. Middle value in this case is 4.

You have long-term relationships with your supplier					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	16	8.0	8.0	8.0
	Disagree	28	14.0	14.0	22.0
	Neutral	22	11.0	11.0	33.0
	Agree	111	55.5	55.5	88.5
	Strongly Agree	23	11.5	11.5	100.0
	Total	200	100.0	100.0	

Table 15: 4.7.5.2

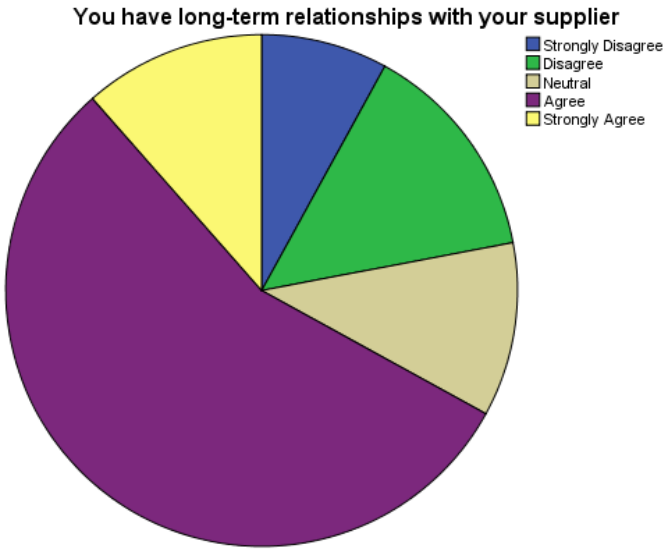

Figure 6: 4.7.5

The aim of this question was to find out that weather the respondents have long term relationships with their suppliers or not. Out of 200 respondents 8% of them strongly disagree while 14% don't agree that they have long term relationships with their suppliers. Whereas 11% of the total respondents gave neutral response as they were not certain about their opinion regarding long term relationships with their suppliers.

However 55.5% of the sample size agreed and 11.5% strongly agreed that they have long term relationships with their respective suppliers. This indicates that 67% of sample size believes that they have long term relationships with their respective suppliers, which shows that the level of trust is high and are aligned to better meet the required performance.

Q6: You and your employees share information to improve process

Statistics		
You and your employees share information to improve process		
N	Valid	200
	Missing	0
Mean		3.71
Median		4.00
Mode		5

Table 16: 4.7.6.1

Descriptive analysis as depicted in the table above shows the mean value of sharing information between organization employees to improve the overall process is 3.71. It shows that an average with which organizations and its employees share information with each other to improve processes is 371%.Mode is 5 which mean that 4 is the number that frequently occurs. As the value 5 indicates strongly agree on five point likert scale which shows that mostly participants strongly agree that they have integration with their own employees with respect to sharing valuable information on time. Middle value in this case is 4.

You and your employees share information to improve process					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	8	4.0	4.0	4.0
	Disagree	30	15.0	15.0	19.0
	Neutral	38	19.0	19.0	38.0
	Agree	60	30.0	30.0	68.0
	Strongly Agree	64	32.0	32.0	100.0
	Total	200	100.0	100.0	

Table 17: 4.7.6.2

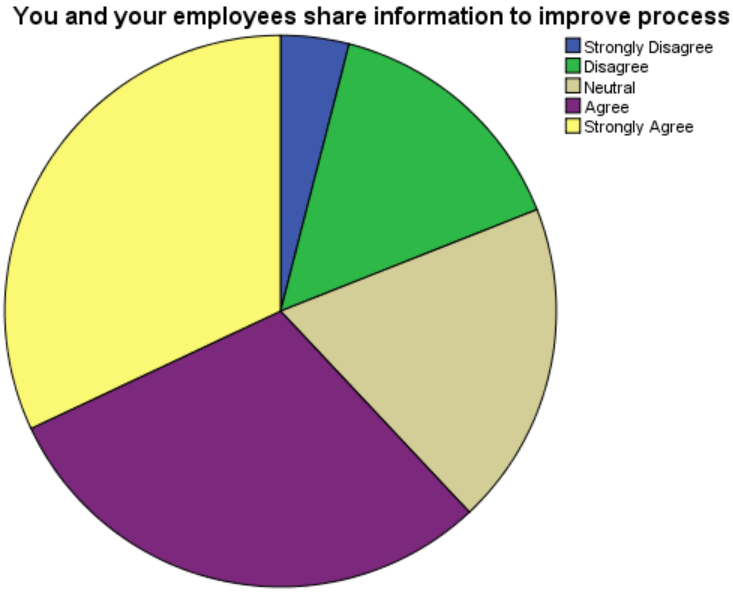

Figure 7: 4.7.6

The aim of this question was to find out that weather the respondents share information among themselves to improve process or not. Out of 200 respondents 4% of them strongly disagree while 15% don't agree that they and their employees don't have effective communication and don't share information to improve process. Whereas 19% of the total respondents gave neutral response as they were not certain about their opinion regarding effective communication and information sharing with employees within firm. However 30% of the sample size agreed and 32% strongly agreed that they have effective

communication and share information with their respective employees. This indicates that 62% of sample size believes that they and their employees have effective communication and share information which helps them to lead and meet the firm needs and requirements.

Q7: Your employees provide and share relevant data with each other

Statistics		
Your employees provide and share relevant data with each other		
N	Valid	200
	Missing	0
Mean		3.68
Median		4.00
Mode		5

Table 18: 4.7.7.1

Descriptive analysis as depicted in the table above shows the mean value of employees providing and sharing relevant data with each other is 3.68. It shows that an average with which organizations employees provide and share relevant information with each other to prevail transparency in the process as well as information is 368%.Mode is 5 which mean that 5 is the number that frequently occurs. As the value 5 indicates strongly agree on five point likert scale which shows that mostly participants strongly agree that they have integration among their own employees and share relevant and transparent information. Middle value in this case is 4.

Your employees provide and share relevant data with each other					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	20	10.0	10.0	10.0
	Disagree	20	10.0	10.0	20.0
	Neutral	32	16.0	16.0	36.0
	Agree	60	30.0	30.0	66.0
	Strongly Agree	68	34.0	34.0	100.0
Th	Total	200	100.0	100.0	

Table 19: 4.7.7.2

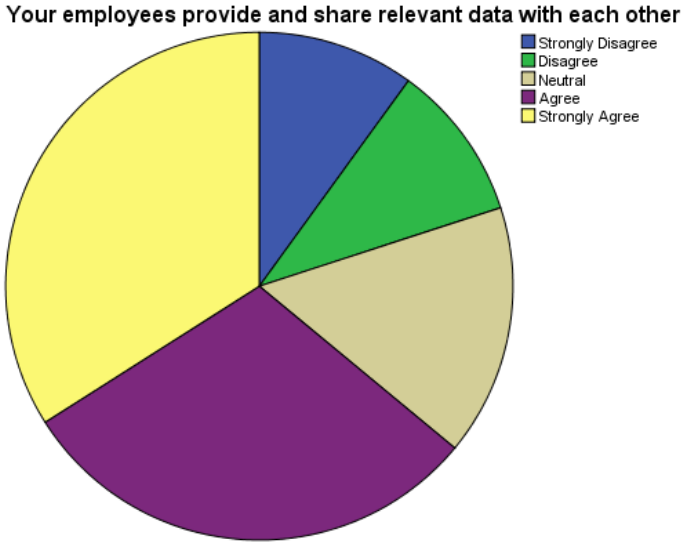

Figure 8: 4.7.7

The aim of this question was to find out that weather the respondents provide and share relevant data or information among all employees or not. Out of 200 respondents 10% of them strongly disagree while 10% don't agree that they and their employees don't have don't share and provide relevant data. Whereas 16% of the total respondents gave neutral response as they were not certain about their opinion regarding effective communication and sharing of relevant data among their employees. However 30% of the sample size agreed and 34% strongly agreed that they share information and provide relevant data.

This indicates that 64% of sample size believes that they and their employees share relevant data to prevail transparency among its operations and provide transparent information so that its firm needs are met.

Q8: You and your employee have transparent information about inventory status

Statistics		
You and your employee have transparent information about inventory status		
N	Valid	200
	Missing	0
Mean		3.49
Median		4.00
Mode		4

Table 20: 4.7.8.1

Descriptive analysis as depicted in the table above shows the mean value of how frequently and transparently information is shared about inventory level is 3.49. It shows that an average with which organizations and it employees share transparent information with each other about inventory status is 349%.Mode is 4 which mean that 4 is the number that frequently occurs. As the value 4 indicates agree on five point likert scale which shows that mostly participants agree that they have integration within its employees about inventory status. Middle value in this case is 4.

You and your employee have transparent information about inventory status					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	3.0	3.0	3.0
	Disagree	31	15.5	15.5	18.5
	Neutral	55	27.5	27.5	46.0
	Agree	76	38.0	38.0	84.0
	Strongly Agree	32	16.0	16.0	100.0
	Total	200	100.0	100.0	

Table 21: 4.7.8.2

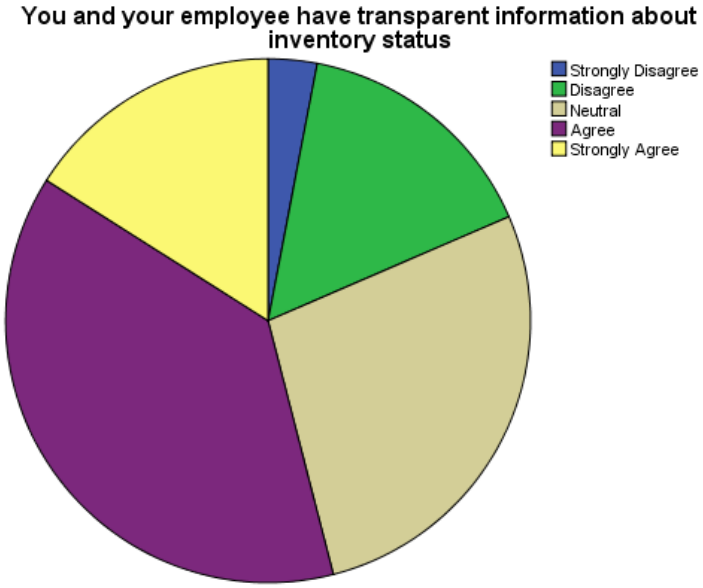

Figure 9: 4.7.8

The aim of this question was to find out that weather the respondents have transparent information about the inventory level in their organization or not. Out of 200 respondents 3% of them strongly disagree while 15.5% don't agree that they and their employees don't have transparent information about inventory status. Whereas 27.5% of the total respondents gave neutral response as they were not certain about their opinion regarding transparent information about inventory status at their organization. However 38% of the

sample size agreed and 16% strongly agreed that they have transparent data related to inventory status among its employees. This indicates that 54% of sample size believes that they and their employees have transparent information about the inventory status which helps them to run its operations smoothly. This also states that employees share information about inventory management plan and status with each other.

Q9: You and your employee are aware when to reorder products

Statistics		
You and your employee are aware when to reorder products		
N	Valid	200
	Missing	0
Mean		3.65
Median		4.00
Mode		4

Table 22: 4.7.9.1

Descriptive analysis as depicted in the table above shows the mean value of awareness about when to reorder product among employees is 3.65. It shows that an average with which organizations and its employees share information with each other about when to reorder the products is 365%.Mode is 4 which mean that 4 is the number that frequently occurs. As the value 4 indicates agree on five point likert scale which shows that mostly participants agree that they are aware of when to reorder to satisfy the needs of customer and to make its operation to run smoothly. Middle value in this case is 4.

You and your employee are aware when to reorder products					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	27	13.5	13.5	13.5
	Neutral	49	24.5	24.5	38.0
	Agree	92	46.0	46.0	84.0
	Strongly Agree	32	16.0	16.0	100.0
	Total	200	100.0	100.0	

Table 23: 4.7.9.2

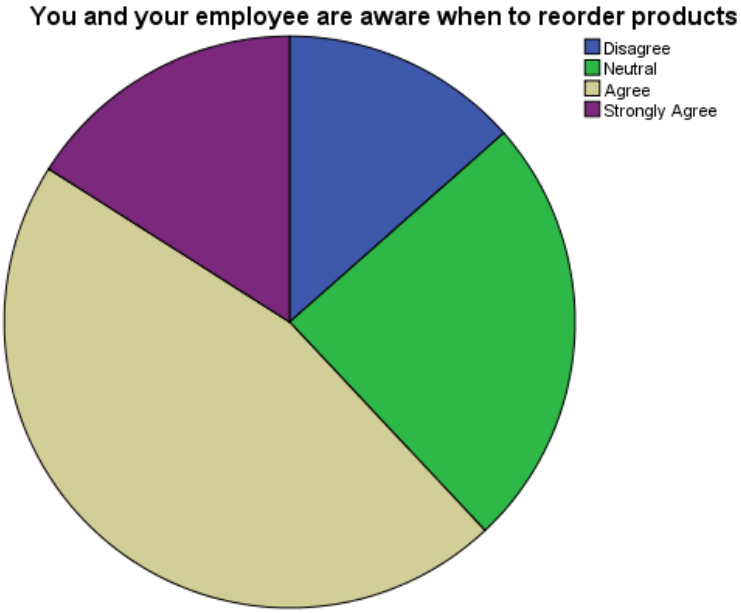

Figure 10: 4.7.9

The aim of this question was to find out that weather the respondents are aware when to reorder products or not. Out of 200 respondents 13.5% of them strongly disagree that they and their employees are not aware when to reorder products. Less integration is been observed. Whereas 24.5% of the total respondents gave neutral response as they were not certain about their opinion regarding when to reorder products among its employees. However 46% of the sample size agreed and 16% strongly agreed that they are fully

aware of when to reorder products. This indicates that 62% of sample size believes that they and their employees are fully aware when to reorder products, this shows that internal integration among employees has been observed which directly improves the operations. Results also show that employees are working in collaboration with other employees to improve organizational processes.

Q10: You are your employees actively participant in procurement process

Statistics		
You are your employees are actively participant in procurement process		
N	Valid	200
	Missing	0
Mean		3.50
Median		4.00
Mode		4

Table 24: 4.7.10.1

Descriptive analysis as depicted in the table above shows the mean value of employees actively participating in the process of procurement is 3.50. It shows that an average with which organizations and its employee's actively participate in the procurement process is 342%.Mode is 4 which mean that 4 is the number that frequently occurs. As the value 4 indicates agree on five point likert scale which shows that mostly participants agree that they actively participate in the process of procurement and have strong integration among its employees. Middle value in this case is 4.

You are your employees are actively participant in procurement process					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	8	4.0	4.0	4.0
	Disagree	28	14.0	14.0	18.0
	Neutral	44	22.0	22.0	40.0
	Agree	96	48.0	48.0	88.0
	Strongly Agree	24	12.0	12.0	100.0
	Total	200	100.0	100.0	

Table 25: 4.7.10.2

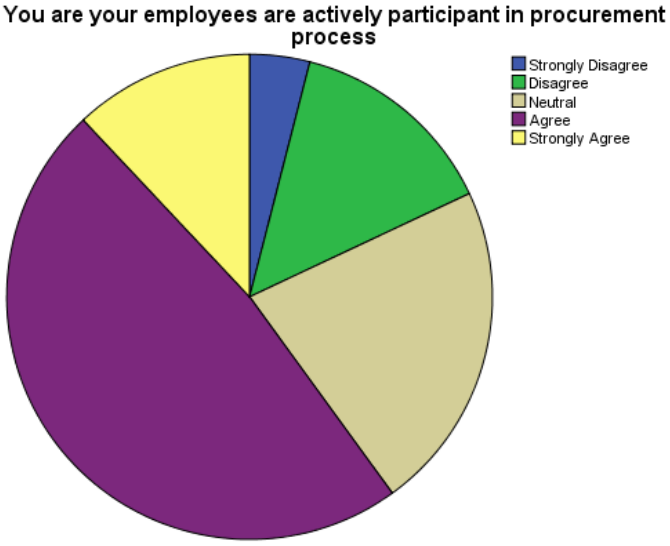

Figure 11: 4.7.10

The aim of this question was to find out that weather the respondents actively participate in the procurement process or not. Out of 200 respondents 4% of them strongly disagree while 14% don't agree that they and their actively participate in the process of procurement. Whereas 22% of the total respondents gave neutral response as they were not certain about their opinion regarding the active participation of their employees in the procurement process. However 48% of the sample size agreed and 12% strongly agreed

that they actively participate in the process of procurement. This indicates that 60% of sample size believes that they and their employees actively participate in the procurement process which helps them to run their operations smoothly.

Q11: You have effective communication with your customers on new products in the market

Statistics		
You have effective communication with your customers on new products in the market		
N	Valid	200
	Missing	0
Mean		3.38
Median		4.00
Mode		4

Table 26: 4.7.11.1

Descriptive analysis as depicted in the table above shows the mean value of having effective communication with customers on new products in the market is 3.38. It shows that an average with which organizations have effective communication and share information with their customers on new products availability 338%.Mode is 4 which mean that 4 is the number that frequently occurs. As the value 4 indicates agree on five point likert scale which shows that mostly participants agree that they have effective

communication with their customers about new products available. Middle value in this case is 4.

You have effective communication with your customers on new products in the market					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	20	10.0	10.0	10.0
	Disagree	24	12.0	12.0	22.0
	Neutral	52	26.0	26.0	48.0
	Agree	68	34.0	34.0	82.0
	Strongly Agree	36	18.0	18.0	100.0
	Total	200	100.0	100.0	

Table 27: 4.7.11.2

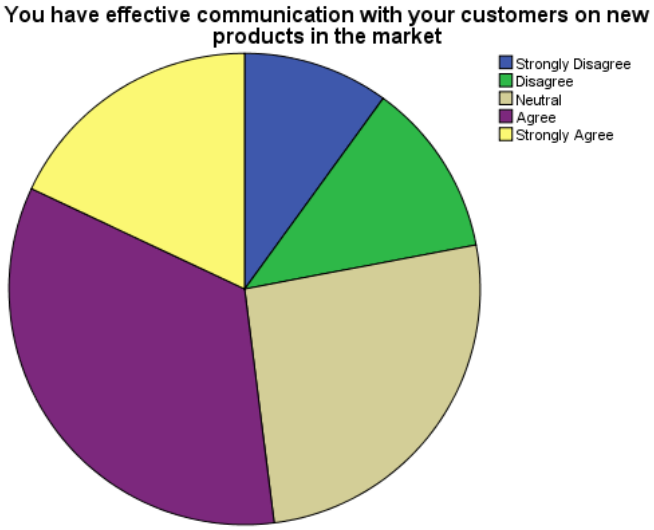

Figure 12: 4.7.11

The aim of this question was to find out that weather the respondents have effective communication with their customers about new products available in the market or not. Out of 200 respondents 10% of them strongly disagree while 12% don't agree that they

have effective communication on new products available in market. Whereas 26% of the total respondents gave neutral response as they were not certain about their opinion regarding effective communication with customers about new products in market. However 34% of the sample size agreed and 18% strongly agreed that they have effective communication with their respective customers on new products. This indicates that 52% of sample size believes that they have effective communication with customers on new products to fulfill the changing demands of the customers.

Q12: You and your customers are aware of each other's medium-term and long-term policies

Statistics		
You and your customers are aware of each other's medium-term and long-term policies		
N	Valid	200
	Missing	0
Mean		3.66
Median		4.00
Mode		4

Table 28: 4.7.12.1

Descriptive analysis as depicted in the table above shows the mean value of customers awareness about your medium and long term policies is 3.66. It shows that an average with which organizations and customers are aware of medium and long term policies is 366%.Mode is 4 which mean that 4 is the number that frequently occurs. As the value 4

indicates agree on five point likert scale which shows that mostly participants agree that they have integration with customers with respect to medium and long term policies. Middle value in this case is 4.

You and your customers are aware of each other's medium-term and long-term policies					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	20	10.0	10.0	10.0
	Disagree	16	8.0	8.0	18.0
	Neutral	24	12.0	12.0	30.0
	Agree	92	46.0	46.0	76.0
	Strongly Agree	48	24.0	24.0	100.0
	Total	200	100.0	100.0	

Table 29: 4.7.12.2

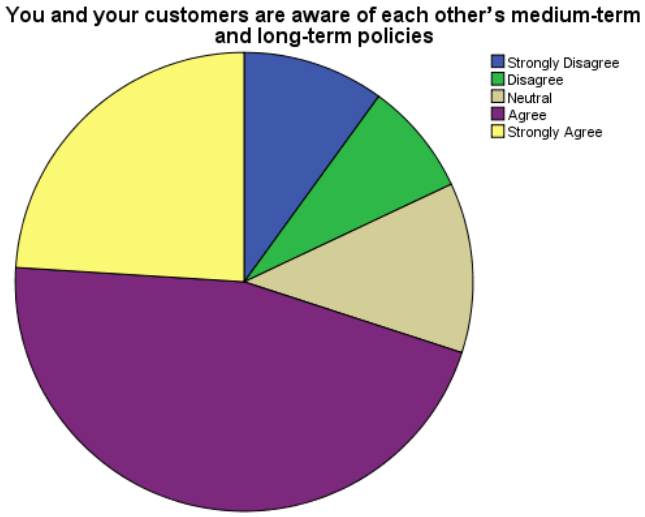

Figure 13: 4.7.12

The aim of this question was to find out that weather the respondents have delivered and its customers are aware of their medium and long term policies or not. Out of 200 respondents 10% of them strongly disagree while 8% don't agree that they and their customers are not aware of their medium and long term policies. Whereas 12% of the

total respondents gave neutral response as they were not certain about their opinion regarding awareness among customers about medium and long term policies. However 46% of the sample size agreed and 24% strongly agreed that they have well delivered their policies to its customers. This indicates that 70% of sample size believes that their customers are well aware about the long as well as medium term policies.

Q13: Your Company has systematic way to measure customer satisfaction

Statistics		
Your company have systematic way to measure customer satisfaction		
N	Valid	200
	Missing	0
Mean		3.50
Median		4.00
Mode		5

Table 30: 4.7.13.1

Descriptive analysis as depicted in the table above shows the mean value of having a systematic way to measure customer satisfaction by the organization is 3.50. It shows that an average with which organizations have a systematic way to measure customer satisfaction is 350%.Mode is 5 which mean that 5 is the number that frequently occurs.

As the value 5 indicates strongly agree on five point likert scale which shows that mostly participants strongly agree that they have a systematic way to measure customer satisfaction. Middle value in this case is 4.

Your company have systematic way to measure customer satisfaction					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	16	8.0	8.0	8.0
	Disagree	40	20.0	20.0	28.0
	Neutral	32	16.0	16.0	44.0
	Agree	52	26.0	26.0	70.0
	Strongly Agree	60	30.0	30.0	100.0
	Total	200	100.0	100.0	

Table 31: 4.7.13.2

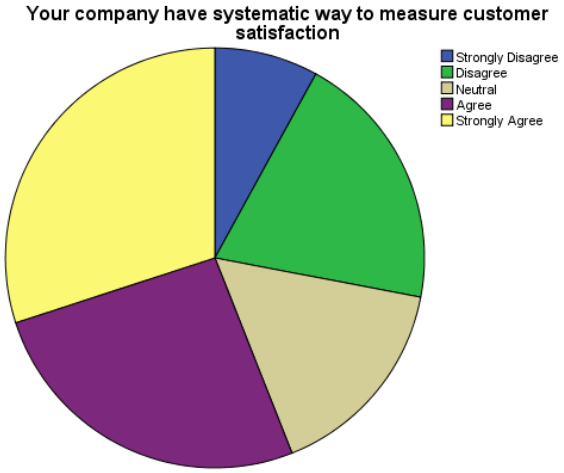

Figure 14: 4.7.13

The aim of this question was to find out that weather the respondents have a systematic way to measure customer satisfaction or not. Out of 200 respondents 8% of them strongly disagree while 20% don't agree that they don't have systematic way to measure customer satisfaction. Whereas 16% of the total respondents gave neutral response as they were not certain about their opinion regarding systematic way to measure satisfaction of

customers. However 26% of the sample size agreed and 30% strongly agreed that they have a systematic way to measure customer satisfaction. This indicates that 56% of sample size believes that they have a proper and a systematic way to measure customer satisfaction. This means that most of the respondents view their customer as a part of their developmental plan.

Q14: You do follow up with your customers for feedback

Statistics		
You do follow up with your customers for feedback		
N	Valid	200
	Missing	0
Mean		3.46
Median		4.00
Mode		4

Table 32: 4.7.14.1

Descriptive analysis as depicted in the table above shows the mean value of organization follow up with their customers for feedback is 3.46. It shows that an average with which organizations follow up with their customers for feedback is 346%.Mode is 4 which mean that 4 is the number that frequently occurs. As the value 4 indicates agree on five point likert scale which shows that mostly participants agree that they follow up with their customers for feedback. This states that many organizations stay in touch with their customers after the buying process is completed. As due to this linkage organizations are

able to get feedback after products purchased. Through this link a real inside of organization's product and service is available which directly helps to create long term and trustful relationship with its respective customers. Middle value in this case is 4.

You do follow up with your customers for feedback					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	44	22.0	22.0	22.0
	Neutral	48	24.0	24.0	46.0
	Agree	80	40.0	40.0	86.0
	Strongly Agree	28	14.0	14.0	100.0
	Total	200	100.0	100.0	

Table 33:4.7.14.2

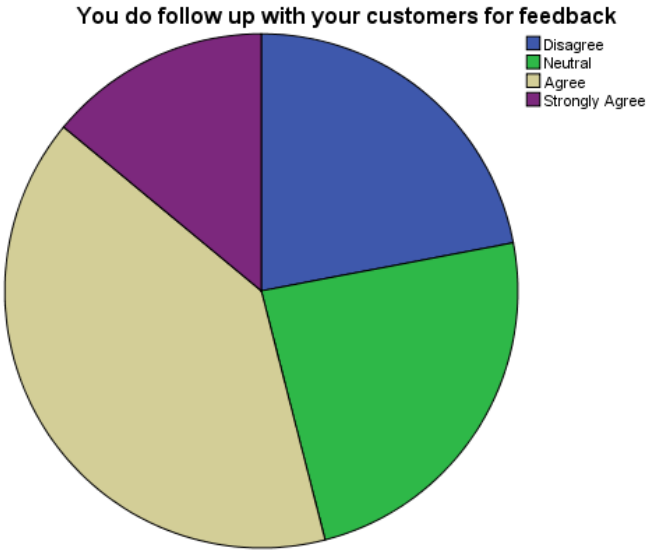

Figure 15: 4.7.14

The aim of this question was to find out that weather the respondents have effective communication with their suppliers on changing or new emerging trends or not. Out of 200 respondents 22% don't agree that they follow up with their respective customers for

proper feedback. Whereas 24% of the total respondents gave neutral response as they were not certain about their opinion regarding follow up to get feedback from customers. However 40% of the sample size agreed and 14% strongly agreed that they follow up with their customer for feedback. This indicates that 54% of sample size believes that getting feedback from customers is a tool of continuous improvement. Through this they believe that this will help them to provide products according to the customer need.

Q15: You offer discounts and bundle packages to your customer Service Quality

Statistics		
You offer discounts and bundle packages to your customer		
N	Valid	200
	Missing	0
Mean		3.52
Median		4.00
Mode		4

Table 34: 4.7.15.1

Descriptive analysis as depicted in the table above shows the mean value of offering discounts and bundle packages to their customers is 3.52. It shows that an average with which organizations offer discounts and bundle packages to their respective customer is 352%.Mode is 4 which mean that 4 is the number that frequently occurs. As the value 4

indicates agree on five point likert scale which shows that mostly participants agree that they offer discounts and bundle packages to their customers. Due to this they believe that they can retain their valuable customers. Middle value in this case is 4.

You offer discounts and bundle packages to your customer					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	48	24.0	24.0	24.0
	Neutral	36	18.0	18.0	42.0
	Agree	80	40.0	40.0	82.0
	Strongly Agree	36	18.0	18.0	100.0
	Total	200	100.0	100.0	

Table 35: 4.7.15.2

Figure 16: 4.7.15

The aim of this question was to find out that weather the respondents offer discounts and bundle packages to their customers. Out of 200 respondents 24% don't agree that they offer discounts and bundle packages to their customers. Whereas 18% of the total respondents gave neutral response as they were not certain about their opinion regarding offers of discounts and bundle packages to customers. However 40% of the sample size

agreed and 18% strongly agreed that they offer discounts and bundle packages to their customers. This indicates that 58% of sample size believes that they offer discounts and bundle packages to retain and satisfy their customers.

Q16: Products provided to customers are differentiated from competitors because of they are readily available

Statistics		
Products provided to customers are differentiated from competitors because of they are readily available		
N	Valid	200
	Missing	0
Mean		3.40
Median		3.00
Mode		3

Table 36:4.7.16.1

Descriptive analysis as depicted in the table above shows the mean value of providing products to customers are differentiated from competitors and are readily available is 3.40. It shows that an average with which organizations provide products to customers are differentiated from competitors and are readily available is 340%.Mode is 3 which mean that 3 is the number that frequently occurs. As the value 3 indicates neutral on five point likert scale which shows that mostly participants were neutral that they provide

products are differentiated from competitors and are readily available. Middle value in this case is 3.

Products provided to customers are differentiated from competitors because of they are readily available					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	6	3.0	3.0	3.0
	Disagree	21	10.5	10.5	13.5
	Neutral	84	42.0	42.0	55.5
	Agree	66	33.0	33.0	88.5
	Strongly Agree	23	11.5	11.5	100.0
	Total	200	100.0	100.0	

Table 37: 4.7.16.2

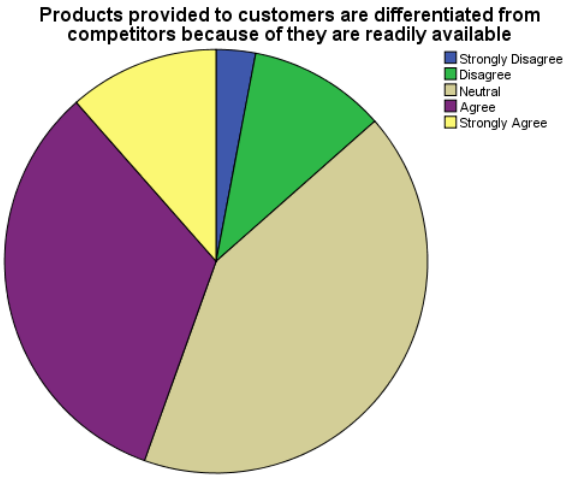

Figure 17: 4.7.16

The aim of this question was to find out that weather the respondents provide products to their customers that are differentiated from competitors as they are readily available or not. Out of 200 respondents 3% of them strongly disagree while 10.5% don't agree that they don't provide products that are differentiated and are readily available. Whereas 42% of the total respondents gave neutral response as they were not certain about their

opinion regarding products provided to the customer are differentiated and are readily available from competitors. However 33% of the sample size agreed and 11.5% strongly agreed that they provide products to their customers that are differentiated from competitors as they are readily available. This indicates that 44.5% of sample size believes that they provide products to their customers that are differentiated and are readily available from competitors.

Q17: Your customer enjoys continual improvement of your service quality

Statistics		
Your customer enjoys continual improvement of your service quality		
N	Valid	200
	Missing	0
Mean		3.66
Median		4.00
Mode		4

Table 38: 4.7.17.1

Descriptive analysis as depicted in the table above shows the mean value of continual improvements of their service quality enjoyed by the customer is 3.66. It shows that an average with which organizations provide and maintain continual improvements in service quality and plan which customer enjoys is 366%.Mode is 4 which mean that 4 is the number that frequently occurs. As the value 4 indicates agree on five point likert scale which shows that mostly participants agree that their customers enjoy continual

improvement in their service quality which shows high involvement of planning. Middle value in this case is 4.

Your customer enjoys continual improvement of your service quality					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	20	10.0	10.0	10.0
	Disagree	16	8.0	8.0	18.0
	Neutral	24	12.0	12.0	30.0
	Agree	92	46.0	46.0	76.0
	Strongly Agree	48	24.0	24.0	100.0
	Total	200	100.0	100.0	

Table 39: 4.7.17.2

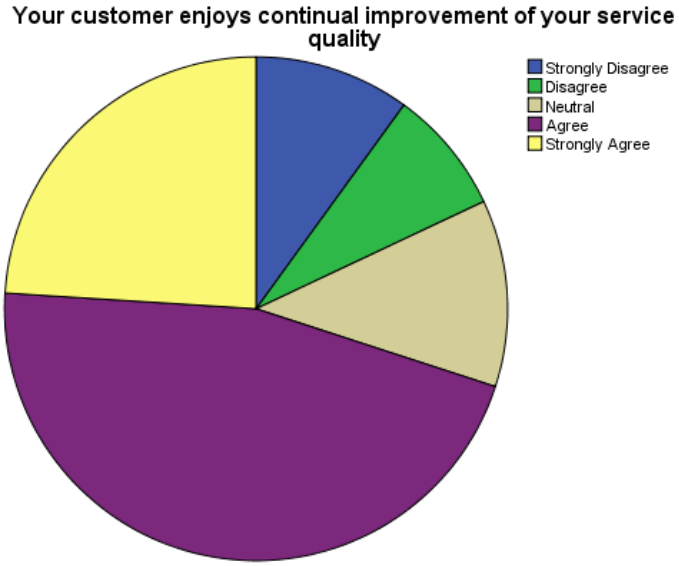

Figure 18: 4.7.17

The aim of this question was to find out that weather the of respondents are able to provide continuous improved service quality that is enjoyed by customers or not. Out of

200 respondents 10% of them strongly disagree while 8% don't agree that they are unable to provide continuous improvement in their service quality. Whereas 12% of the total respondents gave neutral response as they were not certain about their opinion regarding continual improvements in service quality and customers enjoy it. However 46% of the sample size agreed and 24% strongly agreed that they are able to provide continuous improved service quality that is enjoyed by customers. This indicates that 70% of sample size believes that to retain customers they are providing continuous improved service quality so that their customers could enjoy shopping.

Q18: Your customer is satisfied with the quality of products available for sale

Statistics		
Your customer is satisfied with the quality of products available for sale		
N	Valid	200
	Missing	0
Mean		3.50
Median		4.00
Mode		4

Table 40: 4.7.18.1

Descriptive analysis as depicted in the table above shows the mean value of satisfied customer with quality products available for sale from organization is 3.50. It shows that an average with which organizations provides services with quality of products available

for sale and its customers are satisfied from the service offered is 350%.Mode is 4 which mean that 4 is the number that frequently occurs. As the value 4 indicates agree on five point likert scale which shows that mostly participants agree that they their customer is satisfied with services provided as they get quality products that readily available for sale. Middle value in this case is 4.

Your customer is satisfied with the quality of products available for sale					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	1	.5	.5	.5
	Disagree	27	13.5	13.5	14.0
	Neutral	58	29.0	29.0	43.0
	Agree	100	50.0	50.0	93.0
	Strongly Agree	14	7.0	7.0	100.0
	Total	200	100.0	100.0	

Table 41: 4.7.18.2

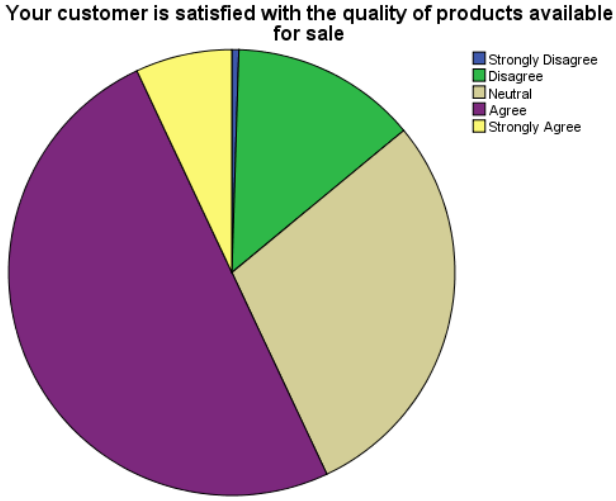

Figure 19: 4.7.18

The aim of this question was to find out that weather the respondents are able to provide their customers quality product that are available for sale and customer is satisfied or not.

Out of 200 respondents .5% of them strongly disagree while 13.5% don't agree that they their customer are not satisfied with the quality products provided to them. Whereas 29% of the total respondents gave neutral response as they were not certain about their opinion regarding customer satisfaction with the quality products provided to customer available for sale. However 50% of the sample size agreed and 7% strongly agreed that they their customers are satisfied with the quality of products available for sale. This indicates that 57% of sample size believes that their customers are satisfied with the quality of products available for sale and enjoys the service provided.

Q19: Your customer is satisfied with the quality service you are providing

Statistics		
Your customer is satisfied with the quality service you are providing		
N	Valid	200
	Missing	0
Mean		3.47
Median		4.00
Mode		4

Table 42: 4.7.19.1

Descriptive analysis as depicted in the table above shows the mean value of customer satisfaction with the service quality provided by the organization is 3.47. It shows that an average with which organizations are able to provide quality service to satisfy its

customer is 347%.Mode is 4 which mean that 4 is the number that frequently occurs. As the value 4 indicates agree on five point likert scale which shows that mostly participants agree that their customer is satisfied with the quality of service provided by the organization. Middle value in this case is 4.

Your customer is satisfied with the quality service you are providing					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	5	2.5	2.5	2.5
	Disagree	21	10.5	10.5	13.0
	Neutral	66	33.0	33.0	46.0
	Agree	92	46.0	46.0	92.0
	Strongly Agree	16	8.0	8.0	100.0
	Total	200	100.0	100.0	

Table 43: 4.7.19.2

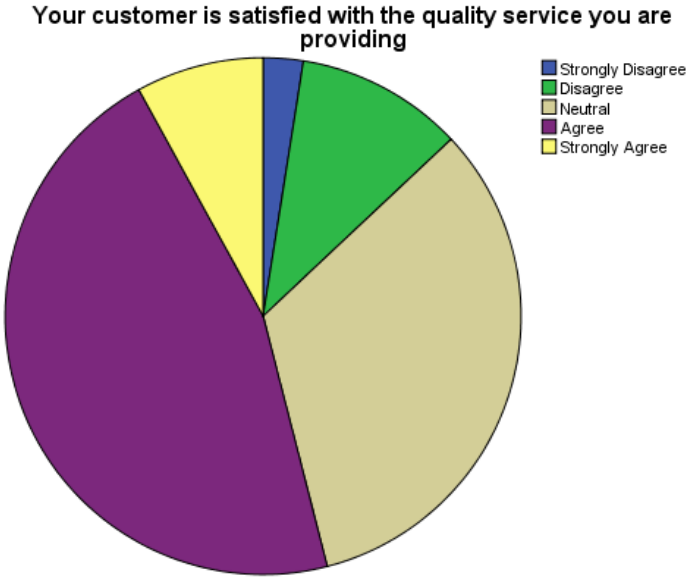

Figure 20: 4.7.19

The aim of this question was to find out that weather the respondents customers are

satisfied with the quality of service provided or not. Out of 200 respondents 2.5% of them strongly disagree while 10.5% don't agree that their customers are not satisfied with the service quality provided. Whereas 33% of the total respondents gave neutral response as they were not certain about their opinion regarding customer satisfaction with respect to service quality provided. However 46% of the sample size agreed and 8% strongly agreed that their customers are satisfied with the service quality provided by them. This indicates that 54% of sample size believes that their customers are satisfied with the enhanced and quality service provided by them.

Q20: You timely respond in a manner to fulfill the needs and wants of the potential customers

Statistics		
You timely respond in a manner to fulfill the needs and wants of the potential customers		
N	Valid	200
	Missing	0
Mean		3.42
Median		4.00
Mode		4

Table 44: 4.7.20.1

Descriptive analysis as depicted in the table above shows the mean value of responding to customers timely and fulfill the requirements is 3.42. It shows that an average with which organizations timely respond to fulfill the needs of the potential customer is 342%.Mode

is 4 which mean that 4 is the number that frequently occurs. As the value 4 indicates agree on five point likert scale which shows that mostly participants agree that they timely respond to fulfill the needs of the respective customers. Middle value in this case is 4.

You timely respond in a manner to fulfill the needs and wants of the potential customers					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	28	14.0	14.0	14.0
	Disagree	20	10.0	10.0	24.0
	Neutral	29	14.5	14.5	38.5
	Agree	87	43.5	43.5	82.0
	Strongly Agree	36	18.0	18.0	100.0
	Total	200	100.0	100.0	

Table 45: 2.7.20.2

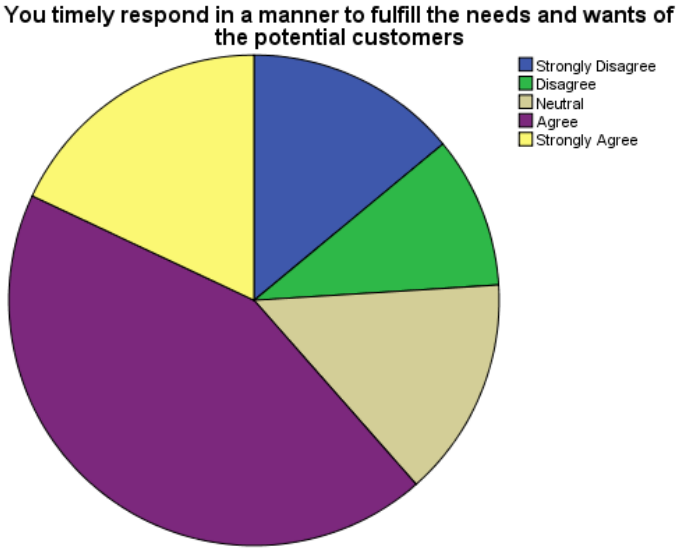

Figure 21: 4.7.20

The aim of this question was to find out that weather the respondents timely respond to fulfill the requirements of their potential customers or not. Out of 200 respondents 14% of them strongly disagree while 10% don't agree that they don't respond to their

customers on time and can't fulfill the needs. Whereas 14.5% of the total respondents gave neutral response as they were not certain about their opinion about responding its potential customers on time and fulfilling the needs on time. However 43.5% of the sample size agreed and 18% strongly agreed that they timely respond to fulfill the needs of potential customers. This indicates that 50.5% of sample size believes that they respond to their customers on time and fulfill the requirement of their customer. This shows that respondents are providing efficient and effective services to its customers by keeping in that customers are the main part development.

Q21: Your company use supply chain integration as a competitive advantage

Statistics		
Your company use supply chain integration as a competitive advantage		
N	Valid	200
	Missing	0
Mean		3.82
Median		4.00
Mode		3

Table 46: 4.7.21.1

Descriptive analysis as depicted in the table above shows the mean value of organization use of supply chain integration as a competitive advantage is 3.82. It shows that an average with which organizations using supply chain integration as a competitive advantage is 342%.Mode is 3 which mean that 3 is the number that frequently occurs. As

the value 3 indicates neutral on five point likert scale which shows that mostly participants are neutral that they use supply chain integration as a competitive advantage. Middle value in this case is 4.

Your company use supply chain integration as a competitive advantage					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	8	4.0	4.0	4.0
	Neutral	80	40.0	40.0	44.0
	Agree	44	22.0	22.0	66.0
	Strongly Agree	68	34.0	34.0	100.0
	Total	200	100.0	100.0	

Table 47: 4.7.21.2

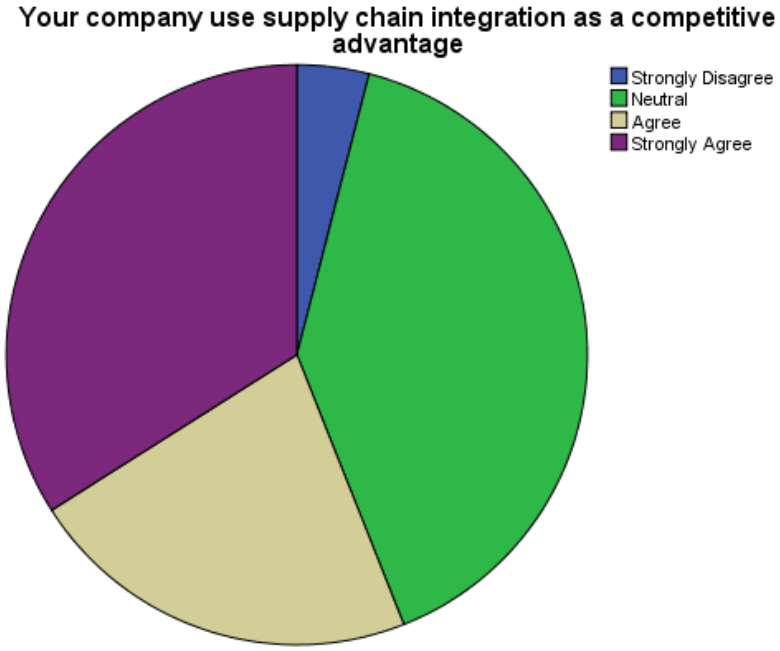

Figure 22: 4.7.21

The aim of this question was to find out that weather the respondents have effective communication with their suppliers on changing or new emerging trends or not. Out of 200 respondents 4% of them strongly disagree that they don't use supply chain

integration as competitive advantage. Whereas 40% of the total respondents gave neutral response as they were not certain about their opinion regarding the use of supply chain integration as a competitive advantage. However 22% of the sample size agreed and 34% strongly agreed that they use supply chain integration as a competitive advantage. This indicates that 56% of sample size believes that they use supply chain integration as competitive advantage which helps them to run their operations smoothly.

Q22: Is competitive strategy important for firm's performance

Statistics		
Is competitive strategy important for firms performance		
N	Valid	200
	Missing	0
Mean		3.64
Median		4.00
Mode		5

Table 48: 4.7.22.1

Descriptive analysis as depicted in the table above shows the mean value of the question that competitive strategy important for firm's performance is 3.64. It shows that an average with which organizations believe competitive strategy is important for firm's performance is 364%.Mode is 5 which mean that 5 is the number that frequently occurs.

As the value 5 indicates strongly agree on five point likert scale which shows that mostly participants strongly agree that competitive strategy is important for firm's performance. Middle value in this case is 4.

Is competitive strategy important for firms performance					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	8	4.0	4.0	4.0
	Disagree	28	14.0	14.0	18.0
	Neutral	52	26.0	26.0	44.0
	Agree	52	26.0	26.0	70.0
	Strongly Agree	60	30.0	30.0	100.0
	Total	200	100.0	100.0	

Table 49: 4.7.22.2

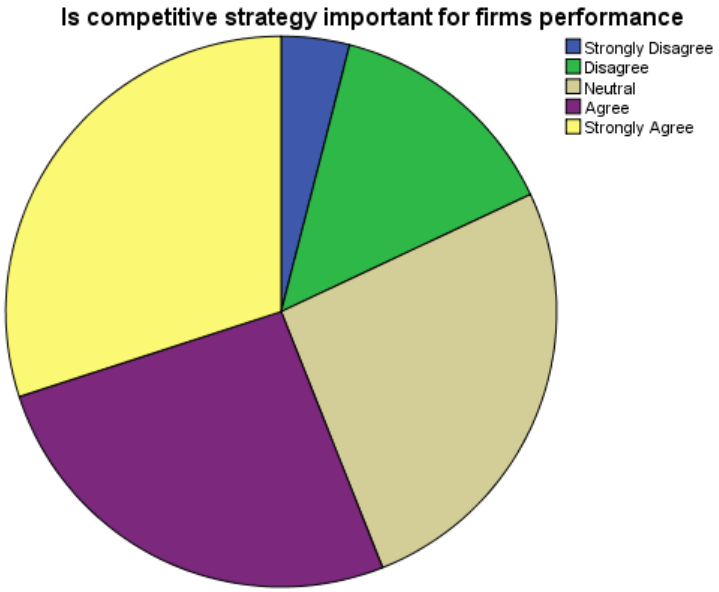

Figure 23: 4.7.22

The aim of this question was to find out that weather the respondents believe that competitive strategy is important for firm's performance or not. Out of 200 respondents 4% of them strongly disagree while 14% don't agree that competitive strategy is not important for firm's performance. Whereas 26% of the total respondents gave neutral response as they were not certain about their opinion regarding competitive strategy as important for firm's performance. However 26% of the sample size agreed and 30% strongly agreed that competitive strategy is important for firm's performance. This indicates that 56% of sample size believes that competitive strategy is important for firms performance as well as to sustain its position in competitive environment.

Q23: You have the ability to consistently deliver on the promised due date

Statistics		
You have the ability to consistently deliver on the promised due date		
N	Valid	200
	Missing	0
Mean		3.50
Median		4.00
Mode		4

Table 50: 4.7.23.1

Descriptive analysis as depicted in the table above shows the mean value of the ability to deliver on due date to its customer is 3.50. It shows that an average with which

organizations have the ability to deliver on due date to its customer is 350%.Mode is 4 which mean that 4 is the number that frequently occurs. As the value 4 indicates agree on five point likert scale which shows that mostly participants agree that they have the ability to consistently deliver on promised due date to its customer. Middle value in this case is 4.

You have the ability to consistently deliver on the promised due date					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	24	12.0	12.0	12.0
	Disagree	12	6.0	6.0	18.0
	Neutral	32	16.0	16.0	34.0
	Agree	104	52.0	52.0	86.0
	Strongly Agree	28	14.0	14.0	100.0
	Total	200	100.0	100.0	

Table 51: 4.7.23.2

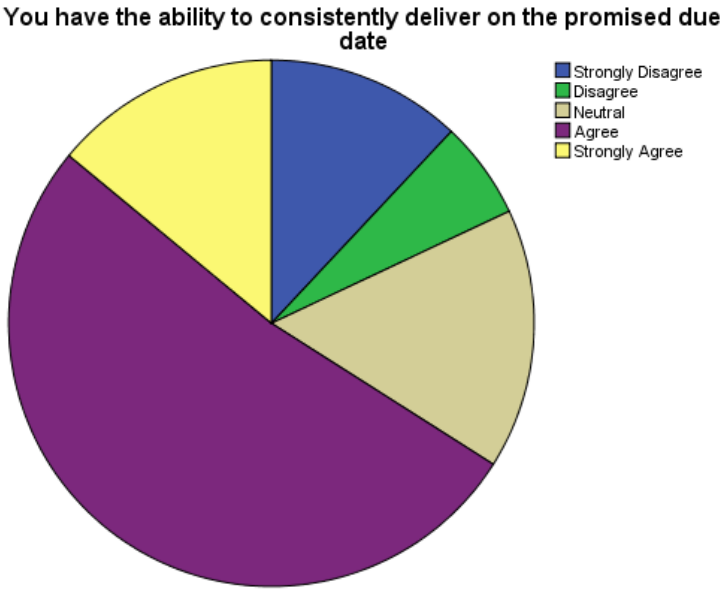

Figure 24: 4.7.23

The aim of this question was to find out that weather the respondents have the ability to deliver on due date to its customer or not. Out of 200 respondents 12% of them strongly disagree while 6% don't agree that they don't have the ability to deliver on due date to its customer. Whereas 16% of the total respondents gave neutral response as they were not certain about their opinion about consistently delivering on due date to its customer. However 52% of the sample size agreed and 14% strongly agreed that they have ability to deliver on due date to its customer. This indicates that 66% of sample size believes that they the ability to deliver on due date to its customer which helps them to retain or sustain valuable customers and also helps in achieving advantage over its competitors.

Q24: You have degree of product variety that lead to gain competitive advantage

Statistics		
You have degree of product variety that lead to gain competitive advantage		
N	Valid	200
	Missing	0
Mean		3.46
Median		4.00
Mode		4

Table 52: 4.7.24.1

Descriptive analysis as depicted in the table above shows the mean value of having variety of products that leads to gain competitive advantage is 3.46. It shows that an average with which organizations have degree of products variety that leads to gain competitive is 346%.Mode is 4 which mean that 4 is the number that frequently occurs. As the value 4 indicates agree on five point likert scale which shows that mostly

participants agree that they have degree of products variety that leads to gain competitive over other competitors. Middle value in this case is 4.

You have degree of product variety that lead to gain competitive advantage					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	16	8.0	8.0	8.0
	Disagree	24	12.0	12.0	20.0
	Neutral	40	20.0	20.0	40.0
	Agree	92	46.0	46.0	86.0
	Strongly Agree	28	14.0	14.0	100.0
	Total	200	100.0	100.0	

Table 53: 4.7.24.2

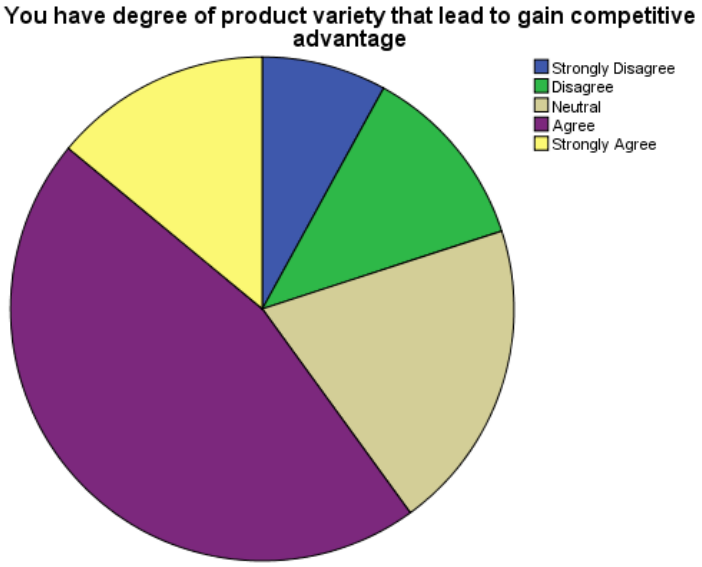

Figure 25: 4.7.24

The aim of this question was to find out that weather the respondents have degree of products variety that leads to gain competitive or not. Out of 200 respondents 8% of them strongly disagree while 12% don't agree that they don't have degree of products variety that leads to gain competitive. Whereas 20% of the total respondents gave neutral response as they were not certain about their opinion regarding degree of products variety

that leads to gain competitive. However 46% of the sample size agreed and 14% strongly agreed that they have degree of products variety that leads to gain. This indicates that 60% of sample size believes that they degree of products variety that leads to gain competitive over other competitors.

4.8 Correlation

Correlations						
		Supplier Integration	Internal Integration	Customers Integration	Service Quality	Competitive Advantage
Supplier Integration	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	200				
Internal Integration	Pearson Correlation	.835**	1			
	Sig. (2-tailed)	.000				
	N	200	200			
Customers Integration	Pearson Correlation	.622**	.747**	1		
	Sig. (2-tailed)	.000	.000			
	N	200	200	200		
Service Quality	Pearson Correlation	.726**	.729**	.833**	1	
	Sig. (2-tailed)	.000	.000	.000		
	N	200	200	200	200	
Competitive Advantage	Pearson Correlation	.777**	.750**	.691**	.802**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	200	200	200	200	

Table 54: 4.8.1

4.8.1 Correlation Interpretation

4.8.1.1 Suppliers Integration

- Supplier's integration is significantly co related to Internal Integration at 0.01 significance level. Pearson co relation value 0.835 suggests that strong correlation exits between Suppliers Integration and Internal Integration. That shows change in Supplier Integration strongly correlates with change in Internal Integration. In other words it also means that if the value of Supplier Integration increases the value of Internal Integration also increases and vice versa.

- Supplier's integration is significantly co related to Customer Integration at 0.01 significance level. Pearson co relation value 0.622 suggests that strong correlation exits between Suppliers Integration and Customer Integration. That shows change in Supplier Integration strongly correlates with change in Customer Integration. In other words it also means that if the value of Supplier Integration increases the value of Customer Integration also increases and vice versa.

- Supplier's integration is significantly co related to Service Quality at 0.01 significance level. Pearson co relation value 0.726 suggests that strong correlation exits between Suppliers Integration and Service Quality. That shows change in Supplier Integration strongly correlates with change in Service Quality. In other words it also means that if the value of Supplier Integration increases the value of Service Quality also increases and vice versa.

- Supplier's integration is significantly co related to Competitive Advantage at 0.01 significance level. Pearson co relation value 0.777 suggests that strong correlation exits between Suppliers Integration and Competitive Advantage. That shows change in Supplier Integration strongly correlates with change in Competitive

Advantage. In other words it also means that if the value of Supplier Integration increases the value of Competitive Advantage also increases and vice versa.

4.8.1.2 Internal Integration

- Internal Integration is significantly co related to Customer Integration at 0.01 significance level. Pearson co relation value 0.747 suggests that strong correlation exits between Internal Integration and Customer Integration. That shows change in Internal Integration strongly correlates with change in Customer Integration. In other words it also means that if the value of Internal Integration increases the value of Customer Integration also increases and vice versa.

- Internal Integration is significantly co related to Service Quality at 0.01 significance level. Pearson co relation value 0.729 suggests that strong correlation exits between Internal Integration and Service Quality. That shows change in Internal Integration strongly correlates with change in Service Quality. In other words it also means that if the value of Internal Integration increases the value of Service Quality also increases and vice versa.

- Internal Integration is significantly co related to Competitive Advantage at 0.01 significance level. Pearson co relation value 0.750 suggests that strong correlation exits between Internal Integration and Competitive Advantage. That shows change in Internal Integration strongly correlates with change in Competitive Advantage. In other words it also means that if the value of Internal Integration increases the value of Competitive Advantage also increases and vice versa.

4.8.1.3 Customer Integration

- Customer Integration is significantly co related to Service Quality at 0.01 significance level. Pearson co relation value 0.833 suggests that strong correlation exits between Customer Integration and Service Quality. That shows change in Customer Integration strongly correlates with change in Service Quality. In other

words it also means that if the value of Customer Integration increases the value of Service Quality also increases and vice versa.

- Customer Integration is significantly co related to Competitive Advantage at 0.01 significance level. Pearson co relation value 0.691 suggests that strong correlation exits between Customer Integration and Competitive Advantage. That shows change in Customer Integration strongly correlates with change in Competitive Advantage. In other words it also means that if the value of Customer Integration increases the value of Competitive Advantage also increases and vice versa.

4.8.1.4 Service Quality

- Service Quality is significantly co related to Competitive Advantage at 0.01 significance level. Pearson co relation value 0.802 suggests that strong correlation exits between Service Quality and Competitive Advantage. That shows change in Service Quality strongly correlates with change in Competitive Advantage. In other words it also means that if the value of Service Quality increases the value of Competitive Advantage also increases and vice versa.

Result: A significant and positive relationship exists between supply chain Integration and performance. Hence H1 has been accepted

4.9 Regression Analysis

It is statistical tool or method which is used to determine the strength of relationship or association exists between dependent and independent variables.

Following table of regression shows the relationship between dependent variable that is Service Quality and independent variable of supplier integration, internal integration and customer integration.

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.875[a]	.766	.762	.356	1.802

a. Predictors: (Constant), Customers Integration, Supplier Integration, Internal Integration

b. Dependent Variable: Service Quality

Table 55: 4.9.1

The value of R is the correlation coefficient. In the above table the value of R is 0.875 that means positive and strong relationship exists between dependent and independent variable. R square means the quantity of variation in dependent variable due to independent variable. Value of R square is .766 which states that one unit change in dependent variable. Adjusted R square is 0.762. This shows that 76.6% variation in dependent variable that is Service Quality is due to independent variables that include supplier integration, customer integration and internal integration.

In the above table standard error of the estimation depicts the estimated variance of the residuals. Standard error depicts the correctness of the model. Standard error tends to decrease as sample increases in its size.

The Durbin-Watson test is applied in order to test the null hypothesis that the residuals from an ordinary least-squares regression are not auto correlated. It includes values that range from 0 to 4. A value near to 2 shows no autocorrelation; a value toward 0 shows positive autocorrelation; a value near to 4 indicates negative autocorrelation.

Durbin-Watson test statistics value is 1.802 is near to 2. It shows that there is no autocorrelation.

ANOVA table presented below, it explains the Analysis of Variance, and table below indicates that how well the regression model predicts or calculates the resulting variable. The ANOVA table shows important statistics including “sum of squares” and F statistics of model.

ANOVA[a]

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	81.197	3	27.066	213.524	.000[b]
Residual	24.844	196	.127		
Total	106.041	199			

a. Dependent Variable: Service Quality

b. Predictors: (Constant), Customers Integration, Supplier Integration, Internal Integration

Table 56: 4.9.2

The above ANOVA table tends to divide the sum of square into components. That is the basis of variance, regression, residual and the F statistics. In case of independent variable constantly predicts the dependent variable then value of significance is .000. The value total sum of squares is 106.041. The value of regression sum is 81.197. The sum of residual value is 24.844. The value of F statistics is 213.524 which is calculated from dividing the mean of regression sum of square by mean of residual sum of squares (27.066 / .127).

Following table of regression shows the relationship between dependent variable that is Competitive Advantage and independent variable of supplier integration, internal integration and customer integration.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.823[a]	.677	.672	.504	1.944

a. Predictors: (Constant), Customers Integration, Supplier Integration, Internal Integration

Table 57: 4.9.3

The value of R is the correlation coefficient. In the above table the value of R is 0.823 that means positive and strong relationship exists between dependent and independent variable. R square means the quantity of variation in dependent variable due to independent variable. Value of R square is .677 which states that one unit change in dependent variable. Adjusted R square is 0.672. This shows that 67.2% variation in dependent variable that is Competitive Advantage is due to independent variables that include supplier integration, customer integration and internal integration.

In the above table standard error of the estimation depicts the estimated variance of the residuals. Standard error depicts the correctness of the model. Standard error tends to decrease as sample increases in its size.

The Durbin-Watson test is applied in order to test the null hypothesis that the residuals from an ordinary least-squares regression are not auto correlated. It includes values that range from 0 to 4. A value near to 2 shows no autocorrelation; a value toward 0 shows positive autocorrelation; a value near to 4 indicates negative autocorrelation.

Durbin-Watson test statistics value is 1.922 is near to 2. It shows that there is no autocorrelation.

ANOVA table presented below, it explains the Analysis of Variance, and table below indicates that how well the regression model predicts or calculates the resulting variable. The ANOVA table shows important statistics including “sum of squares” and F statistics of model.

ANOVA[a]

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	104.278	3	34.759	136.894	.000[b]
Residual	49.767	196	.254		
Total	154.045	199			

a. Dependent Variable: Competitive Advantage

b. Predictors: (Constant), Customers Integration, Supplier Integration, Internal Integration

Table 58: 4.9.4

The above ANOVA table tends to divide the sum of square into components. That is the basis of variance, regression, residual and the F statistics. In case of independent variable constantly predicts the dependent variable then value of significance is .000. The value total sum of squares is 154.045. The value of regression sum is 104.278. The sum of residual value is 49.767. The value of F statistics is 136.894 which is calculated from dividing the mean of regression sum of square by mean of residual sum of squares (34.759 / .254).

CHAPTER 5

CONCLUSION AND RECOMMENDATION

5.1 Discussion

This research was conducted to know about the effect of supply chain integration on performance. How it affects the performance with respect to service quality and competitive advantage of retail industry of Pakistan. The main purpose of the research was to find out the relationship that exists between performance and supply chain integration. The result of this study was presented in such a way that three dimensions of supply chain integration are incorporated and are grouped under independent variable that is supply chain integration and check its relationship with performance in which service quality and competitive advantage are taken as its dimension. This study could be very beneficial for firms in the retail industry of Pakistan as it will assist them to find out the effect of supply chain integration on service quality and competitive advantage and how to maintain it.

In order to conduct this study, data was collected through a structured questionnaire and quantitative approach was used to test the proposed hypothesis. Results of the study showed that all variables selected have positively affected the performance.

The results of Correlation analysis show that all the predictors have a strong and positive relation with the dependent variable. This means that we see strong relationship between integration of supply chain and service quality exists with respect to internal integration, customer integration and supplier integration with the values of 0.726, 0.833 and 0.729. This shows that a strong effect of supplier and internal integration is been observed on service quality. Results of analysis shows that strong and positive relationship between all 3 dimensions of supply chain integration and competitive advantage exits with the values of 0.777, 0.750 and 0.691 respectively. This means that strong effect of supplier, customer and internal integration is been observed on competitive advantage.

From mean, median, mode and pie chart analysis we came to know that most of the respondents agree that they have incorporated supply chain integration in their respective firms but much difference is not been observed in supply chain integration excellence. Proper implementation and effectiveness of supply chain integration in retail industry of Pakistan is at its early stages. It is facing number of challenges as the industry is also not well established. However most of the respondents agree that they have long term

relationships with their suppliers and incorporate them in the supply chain activities. This shows that they are integrated with their supplier but not in an effective way.

From the results we conclude that firms have efficient and effective customer integration with respect to proper and transparent information shared about changing trends, availability of new products, offer discounts and bundle packages to its customers. Secondly have proper communication system to take feedback from customers and take real insights from customers. From the feedback, real insights, responding to customer queries and quality products available for customers, respondents are able to build long term relationships with customers.

Results also indicate that most of the respondents agreed that they fully integrate with their employees related to supply chain activities, operations and plans. Employees share relevant data with each other and actively participate in the developmental plans.

So our current research findings show that integration of supply chain has positive and significant effect on the performance.

In 2009 Kim examined that in Japanese organization supply chain integration is the main source to gain competitive advantage and enhanced performance. In 2014 Raghuram examined that in Indian retail industry, supply chain integration is the main source of better performance. Chang at all examined that effective relationship with suppliers and customers act as one of the major source in improvement and betterment of supply chain and firm performance. Our findings are also aligned with above mentioned results that is supply chain integration has direct and positive influence over performance. With the help of supply chain integration firms are able to develop and maintain an environment through which they are able to take benefit from their internal competencies and able to obtain support from other key players like suppliers and then with the help of all of them they are able to become an competitive entity.

Mutual trust and commitment for shared benefit between organization and other members of supply chain provides the basis for supply chain integration and help in creation of relationship and network that mutually provide benefit for all members of supply chain.

Hand fied and Bechtal examined that supplier integration has strong influence over competitive advantage. As they describe in their study that according to resource base and knowledge base view that relationship and involvement of suppliers in to the organizations process create value in cost management process. Organizations use the knowledge and experience of their key suppliers in order to reduce cost and overall time of process. Our research also shows that supplier integration has direct influence on competitive advantage which is aligned with the finding of Hand fied and Bechtal 2002.

Feng et al (2010) examined that integration with customers has direct and positive influence on quality of service and reliability of delivery. Frohlich and Westbrook's(2001) examined supply chain integration with firm performance and its finding are that a higher degree of supply chain integration leads to better performance. Our study also provides evidence that supply chain integration leads to improve and enhance performance of firm which is aligned with the study of Frohlich and Westbrook's 2001.

5.2 Implications

First, it will help the firms in order to development of supply chain integration strategies and development programs. It will help the managers in order to develop and improve of performance of organization. Second, integration with customers has direct and positive influence over service quality. Integration with customers in retail industry also helps the retail companies in order to improve the effectiveness of supply chain. In order to achieve competitive advantage managers and organizations should have customer orientation and they also need to understand needs and wants of their customers in order to create long term relationship with them. These kinds of long term relationships will help organization in taking inputs from customers and by innovatively fulfilling these needs organizations are able to create competitive advantage which will lead to gain better performance. Third managers should need to understand that internal integration have effect on integration with other members of supply chain. In order to achieve better performance organizations need to have internal integration. If organizations are able to achieve internal coordination this will lead towards integration with customers and suppliers.

5.3 Conclusion

Retail industry of Pakistan cannot grow and sustain its position and performance until and unless supply chain integration is incorporated. If retail stores are unable to achieve supply chain integration, unfortunately their business could compete and sustain its targeted performance. They are unable to maintain service quality and competitive advantage as they cannot collaborate and integrate with customers, suppliers and among their internal operations. The focus of this study was to find the effect and significance of supply chain integration in order to gain and enhance their performance which will lead to growth and progress its business.

The value of correlation test indicates that customer integration with .833 has strongest effect on Service Quality. We define quality as delivering service as per the defined and desired specifications of customers. The firm frequently interacts with customers to set reliability responsiveness and other standards. In addition, it frequently determines future customer expectations as well as measuring and evaluating customer satisfaction. Firms are able to deliver quality when they are practicing strong customer integration. After taking input from customer firms will be able to deliver exactly according to their need. So finally we conclude that higher the customer integration, higher would be the service quality. Results of our study shows that if firms properly implement the concept of supply chain integration with respect to supplier, customer and internally then service quality and competitive advantage can be increased with higher margin which will lead to enhance and improve its performance directly.

So far as retail industry is concerned it is very important for them to focus on the concept of integration with all participants of supply chain. Through this industry will be able to achieve higher and improved performance. More over the root cause for lack of effectiveness of supply chain integration in Pakistan retail industry is the lack of management knowledge related to subject of supply chain integration. So this research will help them in understanding the importance and effect of supply chain integration on enhancing performance.

5.4 Recommendations

- Retail firms have to adopt and incorporate effective supply chain integration as to gain competitive advantage in order to enhance and achieve higher performance.
- In order to enhance the effectiveness of supply chain of retail firms it is necessary for them to incorporate IT throughout the system of supply chain. Retail firms need to connect themselves with their respective suppliers to procure what is demanded by the customers. This will help the firms to maintain stock level and sales.
- Trainings and awareness related to the substance of supply chain integration should be conducted by the retail firms so that proper knowledge and information about the subject of supply chain integration and its concepts are delivered to its employees. Due to this employees can improve and enhance the supply chain integration effectiveness.

5.5 Limitation

As every study conducted has some limitations, this study also has some limitations. During the research following limitations were faced.

- Study was conducted on retail firms only so it is not necessary that this research will help and applied on other sectors/industries as well.
- There are chances of lack of knowledge about the topic among the respondents and answers might be dependent upon his or her own guess.
- Time constraint was a major limitation in conducting the study.
- Sample size included two cities of Pakistan that were Islamabad and Rawalpindi. So there is a chance that retail firm in other cities of Pakistan might have showed different results than our study results.

5.6 Future Research

This study was conducted in only two cities of Pakistan, so future research could be conducted in other cities of Pakistan. Secondly the same study can be conducted on different industry. Future study can be conducted by changing or adding some more factors of internal and external and check its role that how it influence the performance.

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Appendix

Questionnaire

NAME: _____

AGE: _____

GENDER

- FEMALE
- MALE

SR.NO	STATEMENT	STRONGLY DISAGREE	DISAGREE	NUETRAL	AGREE	STRONGLY AGREE
	Supplier integration	1	2	3	4	5
1a	You and your supplier share information with each other					
2a	You and suppliers actively participate with each other in procurement process					
3a	You have effective communications with your supplier on new changing trends					
4a	You and your supplier use information technology for information sharing					
5a	You have long-term relationships with your supplier					
	Internal integration					
1b	You and your employees share information to improve process					
2b	Your employees provide and share					

	relevant data with each other					
3b	You and your employee have transparent information about inventory status					
4b	You and your employee are aware when to reorder products					
5b	You are your employees actively participant in procurement process					
	Customers integration					
1c	You have effective communication with your customers on new products in the market					
2c	You and your customers are aware of each other's medium-term and long-term policies					
3c	Your company have systematic way to measure customer satisfaction					
4c	You do follow up with your customers for feedback					
5c	You offer discounts and bundle packages to your customer					
	Service Quality					
1d	Products provided to customers are differentiated from competitors because of they are readily available					
2d	Your customer enjoys continual improvement of your service quality					
3d	Your customer is					

	satisfied with the quality of products available for sale					
4d	Your customer is satisfied with the quality service you are providing					
5d	You timely respond in a manner to fulfill the needs and wants of the potential customers					
	Competitive Advantage					
1e	Your company use supply chain integration as a competitive advantage					
2e	Is competitive strategy important for firms performance					
3e	You have the ability to consistently deliver on the promised due date					
4e	You have degree of product variety that lead to gain competitive advantage					