"PERCEPTION OF MANAGERS ABOUT SCM TECHNOLOGY IN REDUCING THE COST AT PEPSI"

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List of Abbreviations

SCM   Supply Chain Management

IT   Information Technology

NPD   New Product Development

IST   Information System Technology

OPAC   Online Public Access Catalog

MRP   Manufacturing Resource Planning

WAS   Web Archiving Services

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ABSTRACT

Purpose: - This research is aimed at finding out whether the role and the usage of internet have any impact on the overall mechanism of Supply Chain Management. The study figures out the impact of the information technology in enhancing supply chain performance that would help the organizations to draw the road map for applying and practicing the best information technologies in order to get the best supply chain performance. Huge advances in information technology, has already taken place, the industry has developed both changes, including changes in the supply chain. A fast data transfer and information technology in supply chain resulting in increased cooperation between the supply chain and finally, increased efficiency throughout the supply chain.

Research Design/Methodology/Sample: - The research Design for this research is "Descriptive". In this research the integration of technology is explored at Pepsi Corporation. The data for the research study is gathered and compiled from primary as well as secondary sources**.** The sample size of this research is 47. Questionnaire is selected as an instrument for the research.

Findings: - The study recommends that the awareness of information technologies are very important for manufactories for the purpose of using it and to gain the advantage of information technologies, the manufactories are also using information technologies for saving cost by using labour time utilizing the working hours in a better way to support supply chain performance. An effective supply chain is considered as the key to creating network of sustainable competitive by improving relations inside and outside the organization. Effective information sharing as one of the most basic capabilities of the supply chain process is considered.

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CHAPTER 1

INTRODUCTION

CHAPTER 1: INTRODUCTION

1.1 Background of the Study

In past few years integration of supply chain management has been discussed a lot because organizations now a day's want to be more effectual and look for developing partnerships for more resourceful stream of information. The issues covered by Supply Chain integration are related to the integration of hub processes across organizational limits through better infrastructure, joint ventures and co- operation. The use of new technology for the improvement of flow of information synchronizes the stream of material between trades' associates as even covered in supply chain integration. To be successful supply chain firms require integration inside and outside the firm. Integration internally means with the departments and by outside, companies mean end users and suppliers.

Exhibiting indecision toward data conversion and digitized archiving by the information systems managers can hinder information accessibility, especially for the non-obsolete legacy-data, and can delay online availability through databases. The information seekers' inability to find data easily from online searches result in loss of interest for information because of the unavailability of the data, its obscurity, and absence. Throughout this study, heritage or legacy-data referred to historical information archived on paper-based media. Since archival methods affected information preservation and determined the availability of the data, additional to how accessibility factors in communicating the recorded contents effectively was viewed. The researcher known as Cohn in 2004 concluded that the possibility of data obsolescence could increase with the emergence of new technologies that rendered some software products unattainable. The popularity

infusing Google, Yahoo, and other Internet-based search-engines ostensibly has been replacing old methods for collecting, storing, and searching information from the paper-based media.

Increasing impetus to use the technologically advanced means seemed causing the complete abandoning of former models in data inquiry. Although technology has changed and advanced the archival methods for storing information, querying the data through different arrangements, and the frequency with which desired information was accessed from the online databases, some information remained unavailable through the online query. The unchanged non-obsolete data that was still useful to selective interested groups was one such paper-based information that still was not available from the online queries. To conceptualize a framework for doctoral study of the mentioned problem, a researching candidate should conduct a comprehensive study that uses inappropriate method for approaching the critical issues and is capable of exploring the research problem. Since information is the intricately vital component of an educated decision-making process, the strategies that the information technology (IT) departments devise to collect, store, and manage data as well as making vital information accessible becomes important.

1.2 Statement of the Problem

Analyzing the impact of Supply Chain management and internet technology and how it helps in decreasing the cost at Pepsi Co.

1.3 Objectives

This research is aimed at finding out whether the role and the usage of internet have any impact on the overall mechanism of Supply Chain Management. The following questions are to be researched:

- What is the contribution of internet towards Supply Chain Management?

- How has the internet transformed the operations of activities related to Supply Chain Management?

- What are the steps needed to bring an improvement in internet and Supply Chain activities?

- What is the future of internet in strengthening the role of Supply Chain Management?

1.4 Significance of the study

The researcher known as Creswell in 2005 explained that the researchers approach a problem through mixed methods study when they intend to incorporate a qualitative component into an otherwise quantitative study for better understanding. The mixed methods research increased the target groups' awareness through problem exposure. Many researchers concluded that the raised awareness that follows a problem exposure through doctoral research could increase understanding and also encourage or motivate other researchers to continue conducting other (newer) investigations in the future that may discover similar problems. The benefactors in this study, who were primarily the engineering members from design and manufacturing fields in the spacecraft industries, benefited significantly from the outcome of this research when their online data accessibility increased. This study was an additional innovative contribution toward improving the data management scope for the online information preservation.

1.5 Hypothesis of the Research;

A justification or theories prior accepted and give lane for further research. It is a assumption about certain typescript or population. Hypothesis is based on result such as HO and H1, If H0 is accepted than H1is rejected if our assumption comes true or vice versa. Followings are the hypothesis of this study;

- ❖   HO   There is relationship exists between SCM Procedures reduce the cost
       H1   There is no relationship exists between SCM Procedures reduce the cost

- ❖   HO   There is relationship exists between SCM does any improvement in business.
       H1   There is no relationship exists between SCM does any improvement in business.

- ❖   HO   There is relationship exists between SCM reduces the time of supply.
       H1   There is no relationship exists between SCM reduces the time of supply.

- ❖   HO   There is relationship exists between SCM brings any change in productivity.
       H1   There is no relationship exists between SCM brings any change in productivity.

CHAPTER 2

LITERATURE REVIEW

2.1 Background of the Supply Chain Concepts

Supply Chain management can be defined as the backward and forward flow of goods, information among suppliers, resellers and final consumers. Supply Chain Management is accepted today as a major link between supplier and customer. The researchers known as Lee and Belington in 2007 defined Supply Chain as a network that facilitates the procurement of raw materials, transform them into goods and then final products, finally deliver the products to customers through a proper distribution system. According to the researchers known as Ganesh and Harrison in 2008, supply chain is a distribution of final goods from the point of foundation to the point of utilization i.e. raw material into work-in-progress inventory, then finished goods. The idea of this study is to identify companies with integrated supply chain and whether they achieve better results when they have integrated supply chain activities. We begin with the literature, supply chain definition, its importance on firm performance and evaluation of the integration strategy of supply chain. It will be discussed that how integration helps in the performance of better supply chain activities. Along with that, we present our research that was used an assessment to show companies performing better when they have integrated supply chain (Chandler, 2006, 324).

It is a new model, keeping in mind the importance of supply chain as a subject to study, to realize comprehensive supply amalgamation through interactive and collective operation of supply chain. It focuses on the improvement of the whole supply chain competitiveness by establishing and maintaining a long-term strategic partnership based on information integration, function and business reengineering, organization integration, cultural alteration and strategic resources reorganization, etc. The success of the companies depends upon the integration, internally and externally. The term integrated or integration is commonly used today for defining supply chain

and how companies can build relationships. There is no any particular definition; use of this term is common by both practitioner and university literature. As Ellram and Cooper in 1993, defined supply chain management is supervision of the complete flow of a distribution channel from supplier to end customer. The researchers known as Monzcka and Morgan in 1997 stated that giving the customer the value and managing the processes which are required from outside customer is integrated supply chain. Coordinating and integrating all activities of supply chain management into a flawless process (Clark, 2008, 462).

There are different sectors such as manufacturing, procurement, and distribution channel work collectively in a supportive style to reach at uniformly acceptable results for their organizations. They must remove all barriers in order to simplify the flow of goods, funds, income, and information. By increasing the number of integrated activities in different sectors these barriers can be removed. There were four distribution areas as scope of scope are included i.e. how goods are flowing, scheduling and directing, organizing, and stream of communication. They developed integrated actions measures by having the intensity of integration in supply chain firms. Integration was classified by Bowersox, Closs and Stank (2001) in six different types. Those were client integration, domestic integration, material and service provider integration, expertise and scheduling integration, size integration and association integration. Dimensions of supply chain integration were identified by Lee (2000) which was integration in system, integration in management and sharing of resources. Information sharing between different sections of the firm, coordination among the departments and the firm's relationship with other firms contributes in the highly effective supply chain integration. From the point of view of customers and suppliers there was a lot support available. Aggressive priority has been given to purchasing which plays a key in

firm's performance. It can also be sighted as a forward integration, which includes the flow of material from manufacturer to end users (Cooper, 1997, 15).

The concept of supply chain integration has been studied from both distribution and user's point of view by many authors. The main area between firms for integration is the distribution processes. The researchers known as Childerhouse and Towill (2002) and Lee (2002) had given attention on integration from user perspective by decreasing in the ambiguity of demand and by developing integrated strategies. Integration is not only important inside firms but also across firms. Its importance can only be viewed when studies from both perspectives. The flow of information inside and across the firm is of major concern first. Information technology is the key factor for the success of supply chain integration. Exchange of data internally and also outside the firm through different systems such as MRP is included. Communal relations within and between firms are also included in the study of supply chain integration. High levels of interaction, through communication (by any means), scheduled conferences, and other group work improved supply chain integration. Supply chain integration is the effectual and well-organized way to increase customer service (Corbett, 1999, 83).

Four primary types of integration were proposed by the researchers. Those were:

1. Domestic integration;

2. Backward integration;

3. Forward integration; and

4. Both forward and backward integration.

Two styles for categorization were suggested in this domain, namely integration of information and Integration of organization. The process was defined in three integration stages within each mode which there is low integration, medium integration or high integration. Frohlich and Westbrook (2001) gave another example; he offered a definition based on the idea of integration arcs. Five different groups were described on behalf of the integration strategies. These five arcs were:

1. Arc facing inward;

2. periphery-facing;

3. Arc facing to the supplier;

4. Arc facing to the customer; and

5. Arc facing outward

New technology, continuous performance, standardization of logistics and centralized structure of organization plays a key role in accomplishing internal integration. Information sharing, contacts with suppliers and customers and smooth flow of material between different firms achieved external integration (Creswell, 2005, 122).

2.2 Importance of Internet in Supply Chain Management

Exhibiting indecision toward data conversion and digitized archiving by the information systems managers can hinder information accessibility, especially for the non-obsolete legacy-data, and can delay online availability through databases. The information seekers' inability to find data easily from online searches result in loss of interest for information because of the unavailability of the data, its obscurity, and absence. Throughout this study, heritage or legacy-data referred to historical information archived on paper-based media. Since archival methods affected information preservation and determined the availability of the data, additional to how accessibility

factors in communicating the recorded contents effectively was viewed, Cohn (2004) concluded that the possibility of data obsolescence could increase with the emergence of new technologies that rendered some software products unattainable. The popularity in using Google, Yahoo, and other Internet-based search-engines ostensibly has been replacing old methods for collecting, storing, and searching information from the paper-based media (Croom, 2001, 122).

The trend toward using other online data repositories such as online encyclopedias suggested that digital databases were becoming the preferred method of archiving information. Rapidly and readily accessible information can often result in timely decision making processes by management that could translate into business advantages because of earlier entrance into a competitive business market. Exasperatingly slow and tedious processes of accessing information through paper-based records, and the possibility that an online record could exist, apparently had resulted in the public's desire to change their information retrieval habits to search primarily the Internet. The cumbersome researching process of paper-based data was replaced by new and popular electronic-based practices through which obscured legacy-data should have translated for digitized archiving. The archival methods provided by the modern electronic databases, which were contributing to a changing paradigm in information seeking, were discovered gaining more momentum with the improvements in technology. Increasing impetus to use the technologically advanced means seemed causing the complete abandoning of former models in data inquiry. Although technology had changed and advanced the archival methods for storing information, querying the data through different arrangements, and the frequency with which desired information was accessed from the online databases, some information remained unavailable through the online query. The unchanged non-obsolete data that was still useful to selective interested groups was one such paper-based information that still was not available from the online

queries. Few records, such as engineering specifications, medical charts, or those of other scientific natures, which had been previously available only as paper records like printed forms, charts, and tables shared with colleagues throughout the specialized fields appeared falling into problematic categories. To conceptualize a framework for doctoral study of the mentioned problem, a researching candidate should conduct a comprehensive study that uses an appropriate method for approaching the critical issues and is capable of exploring the research problem (Davis, 1989, 1003).

Since information is the intricately vital component of an educated decision-making process, the strategies that the information technology (IT) departments devise to collect, store, and manage data as well as making vital information accessible becomes important. These strategies should consider the data source's authenticity while precluding possibilities for corrupted data to find its way into the database. The processing quality plays a major part in information finding, authentication, protection, preservation, and dissemination of valid and vital information in consequence. The researcher known as Shehane in 2006 elaborated on the development of a holistic approach to information gathering should include information reliability issues through documentation monitoring and a framework that can aid the decision support system (DSS) for vital and authenticated information. Successful information systems rely on effective database implementation in which the technical complexities are balanced with the interdependencies of the database creation process (Ellram, 1996, 138).

2.3 The role of technology in improving firm's performance and reducing cost.

Information technology was very important in supply chain firms because this plays as a key factor for any progressive results. The use of new data software has made supply chain firms to work more effectively than before. As a result of information technology new ways of managing the material has been explored. Information technology has also affected the working capability of employees without the restriction of the places where they are working from. Employee can manage the inflow and outflow of goods sold and purchased sitting away from his working place. It can be surely assumed that without information technology it would have been difficult for supply chain firms to record the inflow and outflow of materials. Firm performance was the dependable variable of this research. In this study identifying that which critical factors influence firms by which their performance increases. Competition capability emphasized on the competitive advantage that ultimately results in superior value for the firms. Innovation was the competitive capability. Firms always talk about how they can innovate to give their competitors the best competition. The firms performed better when they think that they can give the competitive edge to its rivals (Erdogan, 2009, 836).

2.4 The risk sources of Supply Chain Management.

Supply chain risk sources are characterized by three primary factors: environmental factors, network factors, and organizational risk factors. Environmental risk is regarded as external, while demand and supply risk are considered internal. Environmental risk is comprised of external uncertainties caused by natural, political, and social uncertainties. Network risk includes demand- and supply-side risk. Demand risk pertains to any uncertainty regarding product demand, product life cycle, and outbound logistics flows. Supply risk pertains to supplier relationships and activities. The researcher known as Juttner et al. in 2005 have suggested separating control and process mechanisms as risk absorbers or amplifiers from other sources of risk. Process

mechanisms refer to process designs and implementation practices among supply chain entities. Control mechanisms involve decision making regarding rules and policies, such as batch size, order quantity, and safety stock. Both mechanisms play a role in absorbing and amplifying the impact of risk in the supply chain (Harris-Bowlsbey, 2005, 56).

The researchers known as Ritchie and Marshall in 1993 have stressed the importance of five factors related to business and organizational risk: (1) decision-maker-related factors, (2) problem-specific factors, (3) organizational factors, (4) industry factors, and (5) environmental factors. These authors have identified the broad category of framework based on organizational, industry, and environmental factors. Drawing upon these factors, the researchers known as Rao and Goldsby in 2009 devised a tool to identify different risks and introduced typology of risk to explain how overall supply chain risk is formulated. According to these researchers, organizational risk is comprised of agency, credit, liability, and operating uncertainty. Industry risk is comprised of input, product, and competitive uncertainty. Environmental risk is comprised of political, policy, macroeconomic, and social uncertainty. The researcher known as Johnson in 2001 has argued that the majority of supply chain risk is experienced on the supplier side. Firms should decide between off-shoring and relying on internal suppliers for their materials selection and sourcing. Because of the sheer number of suppliers and the complexities associated with their interdependence, there are many opportunities for supplier failure, including those related to cultural differences, geographic region, and social norms. Occasionally, suppliers possibly may be unable to meet firms' requirements and expectations, so the ability to respond immediately to customers' needs may be compromised. The researcher known as Peck in 2005 has identified the drivers of supply chain vulnerability at four interlinked levels: (1) workflows and information flows, (2) fixed and mobile assets, (3) contractual and trading relationships, and (4) natural and social environments. Peck has

emphasized the dynamic and constantly evolving nature of vulnerability in assessing supply chain risk. Based on the above-mentioned research, this study defines supply chain risk as any disruptions that occur at the environmental, network, and organizational levels and that hamper normal and planned levels of operation (Jaffe, 1998, 267).

2.5 Different aspects related to Supply Chain Management

The Latin root of the word "resilience," resilire, means to rebound or leap back. The concept of resilience has been developed and researched concurrently in diverse disciplines, such as psychology and ecology. In this study, the concept of resilience is adapted from psychology, ecology, economics, health, and education in approaching and overcoming vulnerabilities that each entity across the supply chain faces. Resilience emerged within psychology literatures first. For example, psychological researchers have attempted to discover why some children become more immune to negative factors whereas others show the opposite tendency. Some of the authors made important early contributions to the scholarly literature base regarding resilience in this area of psychology. From the mid-1990s, empirical research has been conducted by many researchers on resilience. According to the researchers known as Garmezy and Neuchterlein in 1972, resilience is the ability to bounce back despite significant adversity or stress. Resilience requires a balance between stress (i.e., risk factors) and the capacity to manage (i.e., protective factors). If risk factors transcend protective factors, individuals become less resilient. Polk (1997) has categorized the main factors associated with resiliency into four categories: relational, dispositional, philosophical, and situational. Among these four categories are factors that include intelligence, sociability, confidence, self-efficacy, optimism, good health, easy-going temperament, internal locus of control, flexibility in goal setting, problem-solving ability, hope, the ability to utilize available resources, and social support. The researchers known as Rice and Caniato in 2003 have discussed

how to build a resilient and secure supply network. Actions to develop security can be divided into three categories: freight, information, and physical security. Increasing resiliency requires flexibility and redundancy (Jones, 2005, 23).

The author known as Sheffi in 2006 has explained that a small number of commodities, multiple suppliers, close supplier relationships, postponement and built-to-order operations, and corporate culture lead to supply chain resilience. McManus et al. (2007) have introduced ways to enhance supply chain resilience through relying on (1) keystone vulnerabilities, criticality, and preparedness; (2) adaptive capacity; and (3) situation awareness. Asbjørnslett (2008) has defined resilience as the ability to sustain and survive in spite of a severe and harmful impact. By drawing multidisciplinary perspectives into the supply chain context, Ponomarov and Holcomb (2009) have combined elements of supply chain resilience from existing literature. Extent of collaboration is defined as the extent to which supply chain entities are collaborating to cope with supply chain risks. Extent of collaboration refers to the activities that create the conditions in which collaborative working becomes possible among entities in the supply chain to deal with supply chain disruptions. The researcher known as Swink in 2006 has argued that a firm's ability to collaborate with partners is a key element in achieving innovative success. Managing risk across supply chains is a network-wide task, and it is possible only with a high level of collaboration. According to Mishra and Shah (2009), firms need to develop routines and practices that lead to collaboration among partners so they can achieve new product development (NPD) success. These authors have identified three types of collaborative activities that involve internal cross-functional employee teams, customers, and suppliers. They further found that supplier and customer involvement and inter-functional cooperation efforts are positively associated with enhancing organizational performance (King, 2007, 493).

In view of agency theory, the researchers known as Zsidisin and Smith in 2005 have suggested that early supplier involvement reduces risk from product and supplier failures by managing outcome uncertainty, programming supplier tasks and accomplishments, creating goal congruence, avoiding adverse selection and moral hazards, and monitoring supplier activities. Involving customers in NPD processes enables design teams to respond quickly to evolving customer needs and preferences, thereby leading to reduced uncertainty in demand. Christopher and Peck in 2004 have suggested that visibility through collaborative planning with suppliers and customers prevents intervening inventory, the bullwhip effect, and supply disruptions by means of clear communication. Collaboration with suppliers and customers when responding to risk as well as redesigning products and processes gives firms that have experienced a disaster a head start over their competitors. Collaboration can provide a bond that unites the combined efforts of firms across the supply chain network and prevents disruption and crisis. The researchers known as Sheffi and Rice in 2005 have argued that empowering those at the lowest level in the decision-making process to respond to disruptions quickly is an important tenet of organizational resilience. When front-line employees are empowered to take corrective actions quickly, firms are able to respond to disruptions more effectively. They can find out what kinds of decisions need to be made better than anyone in the organization. Supply chain partnership increases information flow and knowledge formation, reduces uncertainty, and enhances profitability by delivering low-cost, high quality products more quickly (Koutsakas, 2002, 326).

Supply chain collaboration leads to minimum risk related to forecasting, better coordination of demand fulfillment, and cohesive market focus. Contingency planning is a key to achieving flexibility in that it is impossible to predict any disruptive event with 100% accuracy. At its core, contingency planning is designed to reduce supply chain vulnerabilities. There are two

types of contingency planning: (1) contingency planning that is framed to assure business continuity in response to any form of disaster and (2) contingency planning that is uncertain and considers only various risks to a strategic plan. Contingency planning is effective only when disruptions occur. The researcher known as Tomlin in 2006 has noted that rerouting and demand management are tactics of operational contingency. In response to disruptions, contingent-rerouting plans include increasing production at alternative locations, temporarily switching transportation, and shifting customer demand to alternative products. The researcher known as Sheffi et al. in 2003 have suggested that organizational resilience is enabled by developing contingency planning that describes and defines the roles, procedures, duties, and responsibilities of key players in a firm in case of unexpected disruptions. All entities across the supply chain are required to have contingency plans and tools to take corrective actions when out-of-control conditions are detected (Kraemmerand, 2003, 348).

2.6 Social aspects of Internet Technology and how it increases effectiveness

The social effects of this research plan were the heightened levels of awareness provided to both the information technology personnel and the archivists responsible for legacy-data preservation. A larger population outside of the focused group and the information management was thought to benefit from the outcome of the investigations and the influences of extended discoveries. The goal from planning to conduct contemporary study on the online information accessibility for the specialized legacy-data was to inform and ultimately assist with all forms of information processing into electronic archives for the universal access. The discoveries from this research resulted in changing readers' attitudes toward the online researching paradigm. Readers may discover additional interest for continuing studies of their own that pertain to data conversion and online information accessibility concerns (New, 1997, 22).

The insufficiencies of the online databases yielded very few available studies to retrieve in which the focus was on addressing the question of what might happen to the expert-knowledge if the information becomes unavailable from the online inquiries. The curious nature for expounding the knowledge on this matter prompted reaching the experts to find how they would respond. To understand better if the corroborating data resulted from this study that yielded evidences on the availability of electronically preserved legacy-data encouraging the users of the information to favor the online searching, this study included both quantifiable examinations and qualified information on the discovered problem. The justifying data was obtained through surveys in which both statistical analysis and qualitative expressions were present. Deficiency of the available studies and insufficient prior supporting records that could have enabled conducting a strictly quantitative research and the deficit from qualitative investigation that could provide the explanation resulted in exercising the mixed methods research approach in this study. From a research perspective, a qualitative approach can provide a consensus on the perceived understanding of this unique problem, which could inspire future researches (Olsen, 2007, 58).

2.7 The impact of technology on SCM

Technology continues to change and advance archival methods, data retrieval trends, and the frequency with which specialized information searching takes place. Changes can introduce problems for data archiving that may lead to information losses beyond the recovery attempts that try rescuing paper-based data from destruction. An individual in the leadership position who works with the information processing should become aware of such possibilities. This researcher's hope is that the outcome of this comprehensive study will help develop new strategies that ensure legacy-data preservation. Moreover, the results may lead to developing better mechanisms for data collection, storage, management of information, and accessibility. Evidence of the obscurity of

some information may have led leaders, in such specific knowledge areas, to consider the prevailing trends in general data inquiry habits. Finding the new public trend in information inquiry may require an extensive survey of the opinions of information users. Scientifically obtained surveys often lead researchers to conduct some form of scholarly exploration. The result of such scientific explorations may yield additional explanatory and predictive outcomes that ground in theory and creates better answers for the question of how and why problems exist. Although the theory behind the research for this study is based on the assumption that the loss of information may happen because of data conversion problems, the research cannot be based on the theoretical analysis alone (Parente, 2006, 80).

Conventional thought from scholars suggests that the perceptions of surveyed individuals may play an equally strong role in predicting the trend with which data inquiries are exercised among information users. Leadership affects the organizational process, and information system technology (IST) leaders are influential individuals, as the researcher known as Luftman in 2004 alluded, who can help preserve knowledge for future generations. The IST management neglect to preserve the knowledge can lead to intellectual property loss. Henceforth, the IST leadership's agenda should include data preservation strategies within the risk management plan. The control and the flow of the data should be part of the information technology leadership's efforts. Recent studies on the use of the Web for conducting health-related surveys resulted in the discovery of online health information users' satisfaction with an electronic communication method that superseded a traditional approach. The management teams' commitment to ensuring online access to interesting data for the survey resulted in improved use of the Web and an increase in the approval of electronic communication from participating citizens. Changes brought by the technology advancements have altered the leadership approach for information archival. They

have brought more attention to the need for prioritizing online accessibilities of the information as many researchers have discussed in their articles (Quinn, 1997, 41).

2.8 The role of IT Managers in Supply Chain Management.

The consequential effects of workforce downsizing, a worldwide practice, which many businesses were forced to endured as result of the economic depression, have left many companies with lower management skills and awareness because the more experienced senior managers were unavailable for training. A high priority should have been to train middle managers and improve their technical skills in processing information along with improving their personal skills, which could have brought up their competency levels. Higher competencies contribute to personal intelligence, which can enhance leadership's awareness of problems and can result in mitigating the legacy information archiving problem. The scarceness of studies that discuss the subject of information obscurity with an emphasis on the resulting effects of non-electronic archiving, the possibility of obsolescence or loss of data, and user's preferred methods for searching for information, are perhaps indications of this failure in training (Scott, 1995, 77).

The information technology management's responsibility should include continual practices that emphasize an increasing awareness for the need to preserve every form of data for globally accessed practice as the former information archiving systems become outdated. Information technology managers must be vigilant in their efforts to translate the paper-based data for electronic conversion processes and consider electronic archiving. Management's role should include ordering the data translation and transferring of many sorts of information into electronic archives that currently cannot be found in digitized form. The higher responsibility lies in the information technology leadership role to archive the legacy-data. Nevertheless, middle

management should also become aware and skillful in a similar fashion. Another aspect of the leadership influence on organizational change is the emotional intelligence. The researcher known as Momeni in 2009 stated that the leadership's emotional intelligence sets the culture for the organization. Momeni discovered that the emotional intelligences of the subject managers from the study were the primary reasons for their organizational climate, in addition to their social and self-awareness. Based on such observations, information technology leaders had better become aware of their impact on the preservation of knowledge and exhibit a proactive stance toward information safekeeping that guarantees both permanent and accessible data (Seppanen, 2007, 322).

The information technology managements' neglect to make various forms of information electronically available could lead to information obscurity or loss for some records. The researcher known as Wren in 2005 described management as integral to organized endeavors; an essential activity that attempts to ensure successful process flows for favorable outcomes. Governance is a formidable power that management possesses with which the changes can be brought forth to affect responsive aptitudes. As the leading individual for information archiving, the IST manager has the responsibility to preserve human intelligence in the form of accessible repositories of knowledge. A neglect to act accordingly may result consequently in the loss of the intellectual property. Inefficiencies in planning to store the information in the right place could result in a breakdown of the intelligence gathering required for prompt decision-making, as Beazley, Boenisch, and Harden (2003) have alluded. Most important, the archivist manager's neglect would exacerbate existing data conversion problems. Hence, the IST managers will need better plans or preservation methods for safekeeping knowledge and will need to find the right storage facility for intellectual capital. Online libraries for public use may provide an answer to paper-based archival problems. An extensive study on the circulation effects of the online public

access catalog (OPAC) for information accessibility indicated that the patronage for online inquiries had increased appreciably after the implementation of an online database. An inference from the OPAC circulation effects study would suggest that perhaps information management should consider translating any paper-based information into an electronic database and not neglect data conversion for any records. Hence, creating a standard based on the use of electronic archiving may result in better information processing and dissemination of legacy-data. The decision to convert paper-based data into electronic information for online access depends on the proactive effort of the information management team, and relies on their vigilance in envisioning future trends for information acquisition. The ability to see the changing movement in the user's information inquiry process may keep the obscure legacy-data from becoming obsolete because of an inaccessibility problem (Williams, 2006, 109).

2.9 The importance of data flow in Supply Chain Management

Data obscurity can result from information inaccessibility. When researchers cannot find data on the matters that they are investigating while knowing that the legacy records exist, the obscurity can be the reason. Often hard-to-find data is subject to obscurity, especially when the search for the information leads to no record. No comprehensive prior studies have discussed the problem of hard-to-find data or data obscurity that the researcher could extrapolate from or locate supporting data that could relate to the problem at hand. The referenced conventional wisdom supports the idea that making the information easily accessible may prevent obscurity of the data. Obscurity of sensitive information does not necessarily guarantee its security either as misleading accounts has suggested. On the other hand, technology improvements have led to safer electronic archiving through enhanced data encryption methods. For instance, recent technological advancements in electronic data encryption and procedures that allow deploying secured

applications can account for one such developmental effort toward improving information security measures. Contributors to cryptographic science, such as Charles Peirce, have provided tools to ensure data security. With the advanced technological capabilities and introductions to more data encryptions and the increased use of the Internet, new data security issues have been raised. The researcher known as Gilkey in 1999 stated that most of the attempts to gain access to knowledge through reading journals and going to conferences have been deemed traditionally cumbersome and have fallen short in educating practitioners. The information-gathering systems that have used the Internet as their vehicle for expert knowledge enhancement consequently have proven to be successful. The suggested logical conclusion is to use new information processing and archiving concept as better method for human knowledge exchanging. The Internet has opened extensive opportunities for networking through which viable information exchanges are taking place. More people are using the Internet for searching for information than ever before. With such habitual use, the public inclination for seeking information and accessing data has begun to shift (Zemke, 1987, 47).

2.10 The incidence of information loss in Internet and SCM

The loss of information may be the result of inaccessibility of data from popular media. When knowledge repositories no longer can archive information, or when information from prior recorded knowledge is not available, the result is information obscurity and the data loss that may have occurred already. Additionally, if the system or the knowledge holding facility receives poor maintenance, the information archiving can suffer losses because of media degradation. The probability of information's obsolescence can increase with the emergence of the new technologies

that render some products outdated; hence, the information about such products is then deemed unattainable perhaps because of missing electronically archived data. Information losses because of inaccessibility necessitate investigating the cause and planning preventive measures to protect against future losses by bringing focus to the problem of inadequately preserved data archives. Raising people's awareness of the existing problem can entice others to seek additional information on the problem and can motivate future research through which discoveries of new preventive measures may result. The researchers known as Liu and Tuzhilin in 2008 stated that the identification of the main issues and problems could bring attention to unexplored possibilities. By exposing the problem to bring forth awareness, leadership can take the proper actions to rectify the existing issue and put in place a possible prevention system to address future issues (Zhu, 2006, 250).

Obscure information may never return to use if records maintenance does not plan for future use of such information. The researcher known as Seneca in 2009 described a multi-year project for risk management of Web data archiving that required building an infrastructure for preservation of library materials. In the article, Seneca noted the major benefit of such archival attempts was the development of the "Web Archiving Service (WAS)" with which curatorial efforts are possible. The California Digital Library developed the WAS tool for collecting a variety of library records. The tool was accessible for library patrons and could help researchers with information searching. Since information is an intricately vital component of the decision-making process, the strategies that the leaders develop for collecting data, storing, managing, and making data accessible in information technology departments becomes very important. The information technology strategists should consider the data source's authenticity while eliminating possibilities for corrupted data to find its way into the database (Murray, 2005). The authenticity of data is very

important and its integrity adds to the information's value. The quality of processing the data conversion can play a major role in information finding, authentication, protection, preservation, and subsequently for dissemination of the valid and vital information. Electronic communication technology has provided capabilities in online databases for creating secure and reliable electronic archival systems for a user's rapid access. The researcher known as Shehane in 2006 explained the development of a holistic approach to information gathering should include information reliability issues through documentation monitoring and a framework that can aid the decision support system (DSS) for vital and authenticated information. Particularly, the archiving of scientific data can fall under scrutiny because of the importance of validation of information within database records. Successful information systems rely on effective database implementation in which the technical complexities balance with the interdependencies of the database creation process. For an information repository to validate its content, the database management must exercise security precautions that will ensure data integrity. The researcher known as Buneman et al. in 2004 recommended archiving techniques for scientific data archiving in which both the efficiency for using storage space and the continuity of the information through numerous versions can be controlled and protected (Albrecht, 2007, 12).

Information repositories can expand to encompass other forms, including non scientifically oriented communications such as newspapers, and journals. Many e-journals have been in practical use with countless clientele already subscribing to such online information sources. Online subscriptions to information have begun to establish a new trend for the information communication needs, and the increased potential for a complete turnover from print to online may come to fruition as telecommunication technologies advance. The e-journal subscriptions of special libraries may count toward a growing pattern for online electronic information exchanges.

As more users find electronic information searches a trustable, convenient, and cost-effective approach to explore, the more an emphasis on data conversion and translation of paper-based data into electronic databases become important for every form of information. Traditional systems for archiving information for scholarly research are gradually becoming outdated, by researcher known as Kingsley in 2007 description. More scholars are turning to the Internet for viable and easer information accessing. The continually gaining popularity of the Internet use and the new searching trend suggest that the paradigmatic shift may have already begun. The authors known as Palmer and Eriksen in 2000 acknowledged the possibilities of global distribution of information through the Internet. The movement toward using less paper to preserve the forests, and the notion of going paperless, is another push to change the old habits of information archiving. This new mechanism of information distribution is gaining popularity among seekers of information and is further grounds for changing the traditional approaches forever (Barratt, 2004, 43).

Workers in the information technology field will have to make conscious efforts to notice gains in popularity and changing habits. Promptly preparing an information archiving practice that is in accordance with this new trend of processing information electronically ultimately should become the priority of IST leadership to augment their new roles as archivists. Past ways of archiving human knowledge appear to have given way to today's modern approach. Until the popularity of the Internet and an overwhelming growth in computer use, the majority of the written archives consisted of books printed on paper. Even though paper based records are still in use, much information is available from electronic archives. Converting data so it can be stored in a digitized format can save searching time, especially if data is available from a centrally located organized database. Searching for information online is faster and more convenient, especially when information seekers can electronically query the data from a known Web address (location)

in which data is kept. Even rarely used information can benefit from the availability and the quick access those results from the electronic process, even if information does not fall under the legacy umbrella. Allowing the users readily find whatever information they are seeking from a conveniently located and known online repository can improve their productivity. More rapidly searched and easier to find information allows users to find results conveniently for their electronic inquiries with less time wasted in the searching process. Hence, the process of information researching information online can be a satisfying experience and the preferred method of researchers (Bowersox, 1996, 122).

The transfer of information from paper-based records into electronic archives has proven to promote ease of accessibility and usability for the data. Literature related to user satisfaction with online inquiry suggests that the conversion of legacy and specialized data would benefit from promoting the archival process of electronic storage. A consequential benefit from converting the legacy-data into the electronic repository can be the leadership's heightened awareness for translating other forms of human knowledge to the electronic archives. Using the modern approaches to store the legacy-data in electronic form may lead to positive experience that can interest the information users to seek and acquiring their interested information through the online databases. Mitigation of the risk in information processing will require changes. The researcher known as Pratt in 2007 warned that several areas of information technology misalignments could benefit from operational processes changes that mitigate the information problem. Areas in which information technology misalignments may occur are those of the organizational culture, mission, purpose of archiving the intellectual asset, and the supporting resources. A misalignment also can occur because of the operator mistake that is responsible for preserving the human knowledge. The awareness of risk managers of such misalignments may prompt information technology leadership

to take steps in preventing the misalignments. Technology advances for the modernization of electronic repository methods may approach to a matured stage in which every byte of human knowledge receives its transformation to a modern digitized archival form (Brazel, 2008, 21).

The availability of legible data and the accessibility of necessary information make the passing of knowledge to others more convenient. Conversion of legacy-data from paper based repositories into their equivalent electronic form can provide such convenience and can preserve information longer while providing instantaneous availability. Moreover, the converted data may become electronically attainable online through the Internet. Providing accessibility for information through the Internet encourages information users to seek the preserved knowledge. A study conducted by Carlos Lopez-Sisniega in 2009 on the e Government patronage had shown the strongest factor for use of the online facility was the users' access to the Internet. Providing easier access to information through electronically preserved knowledge databases consequently can encourage the acquisition of knowledge for use. IT leadership should make deliberate attempts to become more familiar with the discoveries of such studies, and respond accordingly to convert legacy-data for electronic archiving. Through many enterprise-networking facilities, the information archivists can collect and manage fractal information for an extended lifecycle using the branch independent research method. The Koutsakas et al. (2002) discoveries explained the flow of information through the information supply chain (ISC) providing better access to knowledge, and making the information processing network more reliable. They alluded that with the new data processing architectures, IT managers should be able to provide cost-effective networking systems that harmonically operate to acquire and disseminate information. The notion behind the promotion of digital translation of every type of information for archival safe keeping whether is it legacy or new knowledge stems from a belief that the digital database archives are

more accessible. An example for such a conjecture may come from the new recording procedures

that the medical group known as Kaiser Permanente in the state of California has adopted. The

health care services provider has changed its paper based patient data recording method to an

electronic data processing system, which can allow patients and physicians to access a variety of

information about health matters online . The changeover of the archival methods also has made it

easier for a member to switch his or her health record to a new residence if the work requires his or

her relocation (Croom, 2001, 122).

Collection, storage, and dissemination of electronically converted information through

many available software tools such as content management systems (CMS) can optimize the

information organization process. As a result, the knowledge workers and the researchers as the

users of such systems will have freedom and wider access to the knowledge in a shorter time. The

important matter is that information conversion of the data takes place at every level so that any

interesting information is electronically accessible to the user. Changes in the modes, and

archiving methods from the formerly paper-based media to electronic forms can in turn, cause

changes in the organization's processes for managed information dissemination. The researcher

known as Scott in 2007 described organizational needs for information can fuel innovative growth,

and as the new technologies emerge, the organizations can change to fit their information

management processes to the new model's added functionality. This process shifting would require

the abandonment of the old methods while demanding the conversion exercise cover the

information translation unilaterally for every form of data. Evidence may show that when changes

in information documentation and accessing occur, the old ways of knowledge preservation may

no longer be effective approaches or the methods that continue to hold popularity among users.

The changing trend, which usually alters the behavior regarding the work of knowledge

preservation and acquisition in a person, can affect the human multiple intelligence paradigm, a term coined by psychologist, Howard Gardner. A user's adaptation to the changing trend can result in new prevailing practical intelligence, as discussed by Karl Albrecht in 2007 and become the new practical approach as a result (Davis, 1989, 1003).

Ensuring the integrity and the correctness of electronically converted and stored information is an important aspect of the electronic information repository. Archivists have exerted continually their best efforts to preserve the integrity of the information in the collected records because preservation and propagation of information kept on shifting from the oral transfer method of the past to that of the written artifact forms. Despite many archivists' arduous efforts, few ancient records have survived in comparison to the enormous volumes that should have existed. The researcher known as Creswell in 2005 has accentuated problems arising from the experimental procedures or participants' understandings in a study as threatening researcher's ability to extrapolate cause-and-effect correctly that coerces both the internal validity and the outcome of the experiment. When researchers misinterpret survey responses from the participating panelists, then the concluding results of the research are questionable. In reference to experimental design and the internal threats for such designs, Creswell (2005) suggested literature from Cook and Campbell (1979), Reichardt and Mark (1998), and Tuckman (1999). A rather long time passing between the start and the end of a study, for example, with the changes occurring during such time that may have altered the participants' perceptions, is one such internal threat to validity of the research results (Ellram, 1996, 138).

Generalization in a study is the threat to external validity. Researchers presumption of the study outcome as a treatment and applicable to the future recurrent investigations is a generalization after the extraneous causes haven been ruled out. Assumptions are external validity

threats that can affect the study results, according to Creswell (2005). The diverging problems resulting from research participants' misunderstandings or the experimental procedures in the study affect researcher's judgment to draw correct inferences for the cause and effect and threaten the validity of the research as Creswell (2005) alluded. The three types of external threats to research validity that can lead to generalization problems are (a) interaction of selection and treatment, (b) interaction of setting and treatment, and (c) interaction of history and treatment. The researchers known as Wang, Chang, Hsiao, and Teng in 2006 referred to some ancient Chinese scores that suffered from environmental corrosion, leaving the artifacts fading presently. Preserving legacy information for extended future would require implementing strict environmental controls that affect the storage climate. During the April 2007 meeting on sustainable climate control strategies, experts from various scientific disciplines participated. The representatives discussed possible alternatives to the conventional air conditioned systems and noted that the preservation of many historical artifacts (including scrolls, and paper records) required tailored stringent environmental controls to conserve different materials (Erdogan, 2009, 836).

The users of information come from all occupations. Based on the individual's needs and the literacy standing, the type of sought information can vary vastly. Before the global availability of the Internet databases and the popularization of various online searching tools, people used to commute to local libraries to conduct research for the information they wanted. As the online databases became more available, and the database administrators enhanced the information contents in those databases, by adding more information with factual evidences and verified accuracy, more people began trusting the information available from the online sources, and they started searching regularly through various search engines. Today's business professionals as well

as distant learners from virtual classrooms are using authenticated information from many online peer-reviewed sources. The researcher known as Brooks in 2001 elaborated on the use of online libraries through which members of the academia can access peer-reviewed full-text articles from databases. Authenticated information from the online sources is not exclusive to the academia and businesses. Average users can access verified critical information when the needs arise. For example, anyone with a personal computer who can connect to the Internet is capable of accessing the Google Map and finding exact routes and distances for a driving trip. Such trusted information is measured physically, its data converted and stored digitally, and available from the well-known online database (Harris-Bowlsbey, 2005, 56).

In general, the public benefits from the availability of information that is readily accessible through many online databases. The sought out specialized information is a particular concern for specific groups, as rare reports are normally not of general interest. Specifications that may be interesting only to a select user group and the protected records that must remain obscured from the public view without the proper authority to access such data fall into this category. Many types of information can benefit particular users if the data is easily retrievable online. Anyone who can access information from the online database is the potential beneficiary because the online information accessing saves travelling time to the local library for the average user. Many members from special groups, such as professionals in the health-care systems, are depending on the availability and the use of information from secured private online sources. The researcher known as Hirji in 2004 discovered that the Canadian health-care personnel were among the stakeholders who greatly depended on digitized information and benefited from the online provisions for information accessing. Practically, everyone can benefit from accessing the information online from trusted databases. The general user labels the users in public and denotes

all who have access to the Internet and are cognizant of how using various features in the online search engines that facilitate the searching for desired information. Although the average person may not find specialized data interesting, accessing of information through online facilities has become favorable in comparison with the troubles of driving to a local library. One of the goals from this study is to ascertain if the preferred information-seeking method has changed in the public's perception. Evidence of the increased use of the Internet for searching information is perhaps an attribute to the changing public attitude toward inquiring (Jaffe, 1998, 267).

Some members of society will fall under special groups or circumstances that require protection of the law for their personal rights. A signed consent from a legal guardian would be needed for such cases if the survey is dealing with minors, pregnant women, and other individuals protected by the Health Insurance Portability and Accountability Act (HIPPA) of 1996. The purpose of obtaining informed consent is to ensure participants' privacy, state how the survey will be administered, and fully disclose the purpose of the study. Informed consent is an integral component of ethical research. Academic researchers from various fields, physicians, other health-care providers, and engineers, are some members of the public who would fall under the special group's label. Many such professionals, for instance the medical doctors or health-care providers, deal with patient records and other sensitive personal information that involves an individual's privacy, which needs protection. Engineers may need access to highly technical data interesting to their job or performance. Protecting the originality of information along with its value and integrity requires planning and routine maintenance on the database. Regular backups, information updating, and security provisions that allow only authorized individuals to access or change the contents of electronic information repositories can ensure the authenticity of data and maintain its value. Database maintenance planning may include provisions that not only safeguard the integrity

of electronically preserved information but also elevate the validity of such documents to the status of legally recognized and binding records (Jones, 2005, 23).

Maintaining the validity of electronic records may require authentication of the data through a verification process that involves peer-review checks by scholars in the fields that such information records pertain. Routine backups of the databases can provide identical records for replicating authentic information. Multiple backups from the same database may prevent record loss by mitigating the risk of losing information because of an unexpected accident. Moreover, a replicated database can easily be transferred to a different database server if the main computer suffers damage while keeping the original information still inside. Converting useful information into electronic records, maintaining the integrity of the data during conversion, and archiving the converted knowledge in electronic storage facilities for the purpose of future reference is the responsibility of information systems technology management and personnel. The leadership of IST management facilities will have the primary responsibility for any data that their IST department is tasked to store and preserve. Activities surrounding information processing can vary depending on the type of data that requires archiving. Not all data is the same. The researcher known as Chisholm in 2009 describes three distinctively different forms exist for data communication. Chisholm has differentiated the three types of data to be that of the reference, the master-form, and the event type data; each form needs a separate management technique. The information technology leadership must react accordingly. Hesitation in translating legacy-data for electronic archiving because of its cost or any other factor could cause failure to preserving the knowledge in this new electronic era. As a result, it may be hindering the information access that can aid the growth of multiple intelligences in people. The relationship between the leadership and the domains where human multiple intelligences are functioning contributes to the leadership's

failure or their success. A better knowledge of personal intelligence that encompasses both interpersonal and intrapersonal environments, the researcher known as Wilson in 2004 explains, could bring forth awareness necessary for one's leadership efforts to prevail (King, 2007, 493).

With technological improvements in telecommunication and falling prices for infrastructure acquisitioning, electronic data archiving has become the more economically feasible route to take. Virtual access to information is the most efficient way of training military personnel, and it can be cost-effective by the Mordvinov (2007) explanation. Moreover, the authors Rockwell and Abeles (1998) indicated that the emphasis on data archiving would eliminate future information obscurity and encourage future research. The expenses incurred to preserve legacy-data in a more accessible form is not only justifiable when compared to expenses for a paper-based information archiving method, the cost may even become less as technology advances. The analysis of existing research literature showed that electronic data storage provides more efficient information archives. Another claim that the author of this study has been suggesting contends that the new trend in information seeking is in the process of changing the legacy knowledge base paradigm. The supporting literature for the latter claim has indicated that people usually prefer to use of an electronic information facility when they have the means to access the Internet and when the information is available in an electronic form. Moreover, and as result of further supportive indications given by Chisholm and Hawn's (2009) studies on the popularity of the electronic information access, the investigating author in this study intends to ascertain survey proof for the paradigmatic shift. The research literature revealed that the tendency of today's information seekers is to go to online sources immediately. This new information searching trend seems to continue growing as more people gain access to online methods (Koutsakas, 2002, 326).

CHAPTER 3

RESEARCH DESIGN & METHODOLOGY

CHAPTER 3: METHODOLOGY

3.1 Overview of the Research Design

The research Design for this research is "Descriptive". In this research the integration of technology is explored at Pepsi Corporation.

3.2. Data Collection Sources

The data for the research study is gathered and compiled from primary as well as secondary sources.

- Primary Sources used for this research is Questionnaire.

- Secondary sources for this research are as follows:

    o Proquest Library

    o E-Business Magazine

    o Company Policies data

    o SCM library

3.3. Instruments for the research

Questionnaire is selected as an instrument for the research.

3.4 Sample Size for the study

The sample size of this research is 47 all the respondents are from Pepsi and they are most of them are managers form the procurement, planning, production and SCM departments, however some of the individuals from the IT departments also been taken as respondents.

3.5 Data collection procedures

The data is collected from the employees at Pepsi. The data is collected from distributing a questionnaire among the respondents at Pepsi. For this purpose I pay a visit to Pepsi in order to determine the aspects of SCM.

CHAPTER 4

PRESENTATION ANALYSIS

ANALYSIS THROUGH QUESTIONNAIRE

Q: 1 what do you think that SCM procedures ultimately reduce the cost?

Table 1: What Do you Think that SCM procedures ultimately reduce the cost?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	42	89.4	89.4	89.4
	No	5	10.6	10.6	100.0
	Total	47	100.0	100.0	

When respondents at Pepsi were asked about whether the SCM procedures ultimately reduces the cost at Pepsi then , 89.4 % which makes 42 respondents out of total respondents showed positively i.e. (YES) which revealed that most of the respondents mark SCM as a practice to reduce the cost while 5 out of them responded in negative manner that is (NO).

Q: Is there any improvement in the business you believe due to SCM?

Table 2: Is there any improvement in the business you believe due to SCM management

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	37	78.7	78.7	78.7
	No	6	12.8	12.8	91.5
	Maybe	4	8.5	8.5	100.0
	Total	47	100.0	100.0	

Table 2 shows that whether there is an improvement in the business due to SCM management. Approximately 79% showed that they had an opportunity to go through all above by implementing the SCM strategies but 13% responded negatively. The main reason why Pepsi is giving some much importance to Developing an SCM structure because they have more than one beverage business (Pepsi + Aqua-Fina). In this regard SCM management reduces the cost to a very minimum level and hence increases the profits.

Q: Does managing SCM at Pepsi reduces the time of beverage supply all around Pakistan?

Table 3: Is managing SCM at Pepsi reduces the time of beverage supply all around Pakistan?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	42	89.4	89.4	89.4
	No	5	10.6	10.6	100
	Total	47	100.0	100.0	

Table 3 shows the response of the respondents when they were asked about reduction in the supply time all around the country. 42 respondents said that the delivery time is improved and this would help in earning more sales and reduction in complaints of shopkeepers, whereas 10.7% representing 5 respondents of total sample size showed that they it is the company procedure which improves the timely delivery and is not the reason of Implementing SCM techniques.

Q: In your Opinion does Managing SCM help to build other Brands at Pepsi?

Table 4: In your Opinion is Managing SCM can helps to build another Brands at Pepsi

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	45	95.7	95.7	95.7
	No	2	4.3	4.3	100
	Total	47	100.0	100.0	

It is necessary to have a spirit of cooperation from staff and with the support of the leaders, because all managers and supervisors must participate effectively in the implementation of the program. We know that a SCM Tools exerts great influence over the project timeline.

When respondents are asked about their opinion of building new brands through SCM activities they are of the view that, SCM is the base of developing new brands as it synthesizes the procedures like a catalyst. 45 respondents are of the view that, SCM helps in building new products as it reduces the cost and company can think of initiating for a new project while, 2 of them disagree with the statement.

Q: Are the tools of SCM helps in developing a Cost Advantage at Pepsi?

Table 5: Are the tools of SCM helps in developing a Cost Advantage at Pepsi

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes, they Are	39	83	83	83
No, they Aren't	8	17	17	100.0
Total	47	100.0	100.0	

Table 5 shows that the tools of SCM help in developing a Cost Advantage at Pepsi. It shows that the implementation of SCM tools is not only reducing the cost factor but on the other hand, it also develops a cost advantage. This cost advantage helps the company to win maximum in times of competition. Out of the 47 respondents 39 showed that SCM has competitive advantage, while 8 indicated that they did not work.

Q: In your Opinion introduction of Technical tools of SCM brings any Change in the productivity?

Table 6: In your Opinion introduction of Technical tools of SCM brings any Change in the productivity?

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes, Because of Process Improvement	41	87.2	87.2	87.2
No, they didn't bring any Change	6	12.8	12.8	100.0
Total	47	100.0	100.0	

The above table indicates that whether the respondents were shown Tools and strategies of SCM changes the productivity or not, 91.2% representing by 41 respondents showed that they got an opportunity to enhance the comp[any procedures, whereas 6 responded that they were not shown that the tools are not really bring some change in procedures.

Q: Are you People Given a Mentor for the training of SCM Procedures?

Table 7: Are you People Given a Mentor for the training of SCM Procedures?

	Frequency	Percent	Valid Percent	Cumulative Percent
Yes	32	68.1	68.1	68.1
No	15	31.9	31.9	100
Total	47	100.0	100.0	

This table shows that whether the respondents were assigned a mentor for their facilitation or not. Mentor is usually present in an organization to provide advice and assistance to others, as a rule for the young people, newly arrived in the organization. The role of mentor involves much less active than the role of the instructor. Mentor is usually involved in the situation to clarify something incomprehensible. Teachers are likely to be experienced people with a high level of knowledge about the structure of the organization, methods and characteristics of its work. Most often, they have direct access to executives. They understand when people are bad, and they can help their students cope with difficult times. The findings indicated that 15 respondents indicating 31.9% of the totals ample size responded in positive manner, while 32 respondents responded in negative manner. A mentor can be appointed to assist in adapting the new employee and be his teacher throughout his career. These relationships continue even when a new employee moves from department to department and from one leader to another.

Q: Rank the SCM and its impact on Cost Reduction at your company

Table 9: Rank the SCM and its impact on Cost Reduction at your company?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	8	17.0	17.0	17.0
	2	16	34.0	34.0	51
	3	16	34.0	34.0	85
	4	5	10.6	10.6	95.6
	5	2	4.4	4.4	100.0
	Total	47	100.0	100.0	

Table 9 shows the responses regarding the timing and duration of the induction, 1 being the strongly agreed and 5 being strongly disagreed. 17% of the respondents showed that they were strongly agreed to the above statement that the timing and duration of the induction was quite appropriate while 34% showed that they were agreed, 34% of the respondents were having neutral response, 10.6% were not agreeing to the above statement and 4.4% were strongly disagreed with the timing and duration of the induction.

Q: Which of them is most suitable in Case of Pepsi?

Table 10: Which of them is most Suitable in Case of Pepsi?

	Frequency	Percent	Valid Percent	Cumulative Percent
Helps in Time Management	15	31.9	31.9	31.9
Helps in Communication	10	17.21	17.21	
Helps in Timely Completion	10	17.21	17.21	
Reduced Manpower and enhance Processes	12	28.9	28.9	100.0
Total	47	100.0	100.0	

Table 10 shows that the overall level of time management has significantly raised in comparison with the different factors. It enjoys a huge majority when we compare the results of other factors such as communication, reduced manpower and timely completion. Although the other factors have also been influencing the Pepsi Corporation, the role of time management is quite imminent. Time management greatly increases the effectiveness of processes and thus the Pepsi Corporation has looked to emphasize on the aspect of time management.

CHAPTER 5

CLOSING UP

SUMMARY OF FINDINGS

The research analysis at Pepsi shows that the company is of the view to have an effective supply chain management network and the more it is effective the more it reduces the cost. Cost reduction is one of the most important tools for a company to remain in the market and to win the market share.

The process of reducing cost at Pepsi Involves:

- to design supply chains that improve supply chain profitability

- Use product design, strategic sourcing, and contracts to most efficiently match supply and demand

- Build and maximize supply chain coordination and collaboration

- Identify supply chain risks and design risk mitigation strategies

- Explore purchasing, production, and distribution strategies for a global environment

At Pepsi the main focus is on designing a flexible plan for the upcoming new products. The company is continuously inventing a new of products to compete in the market. From beverages to snacks there are a number of products that the company wants to introduce in the market. The important part here is that the company already has a proper infrastructure which helps in supporting the introduction of any new product.

Pepsi views the market in an innovative manner and thus go for intervention of technology in designing their Supply chain networks. The main aim of the company is to reduce the cost factor which ultimately increase the market share and hence the profits.

For this company uses an ERP which helps in support decision making which is the major part of planning process. The company is of the view to strengthen the collaboration among the departments. The collaboration increases the flow of information and hence the work related structure become more flexible.

INFORMATION SHARING & COORDINATION

Flexible Chain Reduces Risk and Enhance Forecasting

Flexible SCM strategy increases the collaboration which reduces the effect of risk and enhances the productivity. This collaboration leads to minimum risk related to forecasting, better coordination of demand fulfillment, and cohesive market focus. Contingency planning is a key to achieving flexibility in that it is impossible to predict any disruptive event with 100% accuracy. At its core, contingency planning is designed to reduce supply chain vulnerabilities. There are two types of contingency planning: (1) contingency planning that is framed to assure business continuity in response to any form of disaster and (2) contingency planning that is uncertain and considers only various risks to a strategic plan. Contingency planning is effective only when there is proper Coordination and Information Sharing among the departments.

Technology and Supply Chain Reducing Cost

Information technology was very important in supply chain firms because this plays as a key factor for any progressive results. The use of new data software has made supply chain firms to work more effectively than before. As a result of information technology new ways of managing the material has been explored. Information technology has also affected the working capability of employees without the restriction of the places where they are working from. Employee can manage the inflow and outflow of goods sold and purchased sitting away from his working place.

It can be surely assumed that without information technology it would have been difficult for supply chain firms to record the inflow and outflow of materials.

CONCLUSION

Supply Chain management can be defined as the backward and forward flow of goods, information among suppliers, resellers and final consumers. Supply Chain Management is accepted today as a major link between supplier and customer. At Pepsi the SCM is viewed as a major part of their strategy. The company focuses more on utilizing internet as a source of defining a new trend in the aspects of planning and Coordination, Supply Chain at Pepsi works as a network that facilitates the procurement of raw materials, transform them into goods and then final products, finally deliver the products to customers through a proper distribution system. Supply chain is a distribution of final goods from the point of foundation to the point of utilization i.e. raw material into work-in-progress inventory, then finished goods. The idea of this study is to identify companies with integrated supply chain and whether they achieve better results when they have integrated supply chain activities. We begin with the literature, supply chain definition, its importance on firm performance and evaluation of the integration strategy of supply chain.

RECOMMENDATIONS

Some for the important recommendation which I believe for the company is that:

- Reducing cost is one of the most important tools but reducing cost didn't mean that the company would compromise on quality. Most of the consumers complain about the taste of Pepsi. Therefore, in order to be the number one market brand the company could focus on quality improvement also.

- The company is managing efficiently their SCM networks through technology and integration but they have to focus more on fair and free competition. It has been viewed that Pepsi being the market leader in Pakistan forces dealers to either stock Pepsi or Go for Coke.

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