

Exploring the Emerging Trends and Issues in Supply Chain Management: A Case of Pakistan

Mubashar Hussain, Ahmad Bin Jusoh and Syed Afraz Gillani

Abstract--- *With the increasing speed of globalization and international business expansion, it is evident that the resources in this world are needed to be used in an efficient and effective manner. This highlights the importance of efficient supply chains in developing nations specifically. The particular context of Pakistan will be the focus of this paper discussion. The research used a qualitative thematic analysis to explore the concept of SCM by taking 10 semi-structured interviews from supply chain professionals selected by purposive sampling. Five main themes emerged after the interview analysis i.e. definition and concept of supply chain management (SCM) issues of SCM, current successful strategies, further successful strategies, ingredients for further betterment of SCM. This paper offers insights for the industry practitioners and organizational managers with a deeper understanding of the dynamics attached with the use and achievement of SCM.*

Keywords--- *Supply Chain Management, Qualitative Research, SCM Issues, SCM Successful Strategies, Important Ingredients of SCM, Important Framework, Pakistan.*

I. INTRODUCTION

With the increasing research in supply chain management, scholars are trying to investigate and study the potential issues for business firms, customers and different service providers. Various integrated fields like relationship marketing, channels of distribution, customer satisfaction, lean management, designing the optimum supply chain are aiding to broaden the base of SCM literature (Hunt & Davis, 2008).

SCM mainly focuses on attaining the higher customer satisfaction; involving mutual cooperation of different firms, function of firms and processes to fulfill the customer's expectations. SCM is based upon integrating and coordinating the various functions, practices and processes within a firm and among different firms to get best outcomes (Frankel, Bolumole, Eltantawy, Paulraj, & Gundlach, 2008).

In modern competitive economy, organization can only compete in the market by designing and developing the mutual coordination and collaborative associations within and beyond their professional expertise. Organizations employ the SCM practices to optimize their performance, create their competitive advantage, value maximizing, and better mutual relationships (Morana, 2013; Trent, 2004). SCM comprehensive definition helps the scholars to build supply chain concept, assess and examine the relationship among several parts of supply chain and SCM, and sound bases of research stream and research literature synergy. Absence of a uniform and comprehensive definition of SCM, practitioners and supply chain managers would be unable to select the right combinations and supply chain process to manage their firms supply chains properly (Crum, Poist, Carter, & Liane Easton, 2011).

*Mubashar Hussain, Ph.D. Scholar, Azman Hashim International Business School, Universiti Teknologi Malaysia.
Email: mubasharhussain1989@hotmail.com*

*Ahmad Bin Jusoh, Deputy Dean Student Affairs, Azman Hashim International Business School, Universiti Teknologi Malaysia.
Syed Afraz Gillani, Ph.D. Scholar, Azman Hashim International Business School, Universiti Teknologi Malaysia.*

Council of Supply Chain Management Professionals have differentiated the SCM from logistics, Logistic is a part of supply chain processes encompassing the planning, implementation, and controlling the flow as well as storage of products and related knowledge from the originating to consumption point for serving the customers better. Recently CSCMP suggested another definition for logistics management as a SCM part that includes the planning, implementation, and controlling of forward as well as reverse flow and storage of product and related knowledge from originating to consumption point for better serving the customers (CSCMP, 2016).

On the other hand Heizer, Render, and Munson (2016) stated that SCM includes planning and managing all the processes, functions, and activities related to sourcing and procurement of materials, services etc., conversion of these material and services to firm's products, and all activities under the Logistics Management scope. More significantly, SCM also encompasses the activities related to collaboration, coordination and mutual relationships with channel constituents including suppliers, intermediating partners, third-parties, service providers, as well as customers. It also coordinates and integrates the supply and demand functions within the organization or across different organizations

In 2016, CSCMP have set some boundaries for SCM acts as an integrating unit having the basic responsibility of integrating different main business processes, units, functions and parts of within and across the business entities into an organized and efficient business model. It also encourages coordination among the processes, functions, activities and practices of with and across different department of the firm like marketing, manufacturing, sales, product designing, finance and IT (CSCMP, 2016).

SCM is an important aspect because it suits the profitability and performance of business organizations around the world and it also contributes towards the sustainability of resources existent in this world. Therefore, the techniques used for distribution, production and sourcing are required to be effective across the international markets. This is a major reason why the function of supply chain management is getting much attention of practitioners, governments and researchers all around the globe. The success and management of supply chain systems is highly attributed towards the successful and adequate functioning of organizations around the world (Arlbjørn, de Haas, & Munksgaard, 2011). Therefore, efficiency of supply chain function is a contemporary issue and, in this paper, different approaches will be discussed for an effective use of supply chain function for business, so that this function can be improved in the best interest of organizations and the outside world.

Research Gap

In developing economies, SCM concepts and practices are even more important, but mostly they are not investigated and explored like, for example in Pakistan, a few quantitative researches have been conducted so far in the given context of a developing country (Abbasi, 2012). Quantitative research does not offer deeper insight into the views of supply chain managers regarding the effective strategies implemented in context of specific countries. interviewing is deemed appropriate for getting information related to complex issues in field of management (Goffin, Lemke, & Szwejczewski, 2006; Massaroni, Cozzolino, & Wankowicz, 2014). Since last decade, much of research studies in area of management have employed qualitative methods, yet only 8.9% of the research studies in SCM have adopted this method (Flint *et al.*, 2012). There is a dearth of qualitative inquires in field of sustainable

supply chain management particularly in specific context of Pakistan which reflects a huge research gap. Therefore, the underlying aim of this paper is to explore and present the contemporary strategies and trends prevailing in Pakistan in the context of supply chain management.

Research Objectives

The research objectives are stated as follows;

1. To develop enhanced understanding regarding the supply chain management concept and then exploring the much burning issue related to this field of study so that solution can be provided.
2. To explore the elements of a successful SCM.
3. To examine the current and future best strategies in field of SCM.
4. To dig deep into the strategic front of supply chain management for business organizations so that useful approaches can be identified for the improvement of this function.

Research Questions

The research questions are stated as follows;

1. What is the concept of sustainable supply chain management concept?
2. What are burning issues related to sustainable SCM in Pakistan?
3. What strategies of SCM are effective in Pakistan?
4. How strategies can be implemented to improve sustainable SCM in Pakistan?

II. LITERATURE REVIEW

Initial researches, since the last two decades have focused on defining the concept of sustainability and its relationship to the supply chains with its importance and advantages (Seuring & Müller, 2008). Sustainability being an interdisciplinary subject which integrates both the social and physical sciences (Linton, Klassen, & Jayaraman, 2007), has multi-lateral, inter-generational, and multi-dimensional characteristics making the field more challenging to the study (Seuring, Sarkis, Müller, & Rao, 2008).

Seuring (2013) stated that SCM can be described as a comprehensive set of operational and technical characteristics and considerations related to collecting, sorting, testing, redesigning and remanufacturing of the products returned by the customers. This area is classified in these functions and researched accordingly: (i) planning, scheduling and controlling of production processes (ii) Inventory Management processes (iii) reverse or backward logistics and, (iv) Importing the related goods.

In this section, wide range of managerial considerations is discussed with some major concerns and academic researches to address these concerns.

Strategic Concerns

Organizational strategy

Managerial concerns in organizational strategic considerations involve these questions: (i) what is the organization's approach towards the sustainability? (ii) How organization can integrate its strategic concerns to the

environmental factors? (iii) How do the environmental factors influence the firm's grounds of existence, theories, goals, behaviors, frameworks, and associations in the market? Limiting this debate to value chain aspects, major concerns and issues related to strategic value of prevention of pollution and productivity benefits from it are summarized here. Massaroni *et al.* (2014) has suggested that resources inefficiency causes pollution. They further suggest that employing green environment initiatives may play a role in organizational competitiveness. This ecology vs. economy relationship is socially beneficially but decreases the competitiveness of firms due to higher pollution preventions costs. It focused on six economic sectors i.e. power generation, manufacturing, transportation, construction, industrial, waste disposal and agriculture sectors in Pakistan.

P1: Efficiency is the key to resolving issues facing supply chains in Pakistan

Supply chain structure and strategy

This section discusses the dimension of managerial decisions encompassing the supply chain structure and options available to firms to employ the sustainability. In this regard, most of the studies have focused on developing the reverse SCs for collecting and remanufacturing the damaged returned products, supply chain incentives development to encourage the other constituents of SC, and maintaining a balance between new and remanufactured products.

(Savaskan, Bhattacharya, & Van Wassenhove, 2004) have studied the issues related to selecting an optimum channel of reverse supply chain to collect, sort, and remanufacture the returned products. Generally, an organization may collect returned products by three ways: (i) collecting the products directly from their users (ii) giving retailers different financial benefits to encourage the collection and/or (iii) contracting to a third party for collection (Seuring, 2013). Flint *et al.* (2012) has studied the remanufacturing workplace environment from marketing aspects with some features of these products like low-cost, supply constraint etc.

P2: Management structure and strategies play an important role in SCM

Functional interfaces Concerns

This part discusses some particular managerial concerns and some trade-offs organizations should employ in order to get sustainability in their management practices.

Regulations and government policies

Government policies and regulations play a key role to motivate the firms to implement sustainability practices in their managerial decisions. Conventional government regulations command the firms to implement minimum standards of pollution prevention. For example, environmental taxes like carbon tax, certain proportionate of power from renewable sources and giving subsidy for solar and wind power technology etc. (Morana, 2013).

P3: Government regulations play an important role in SCM

Extended producer responsibility (EPR)

EPR is a major example of marketing aspect of sustainability. There are two main objectives of EPR policies, making the producers responsible for products environmental performance rather than the municipalities, and

providing benefits to the producers to consider environmental concerns of their products ((Lin, Yan, & Davis, 2001), Organization for Economic Cooperation and Development (Lifset, Atasu, & Tojo, 2013)

P4: EPR play an important role in SCM

Arlbjørn et al. (2011) have identified technology, business process and network structure as major elements of supply chain management.

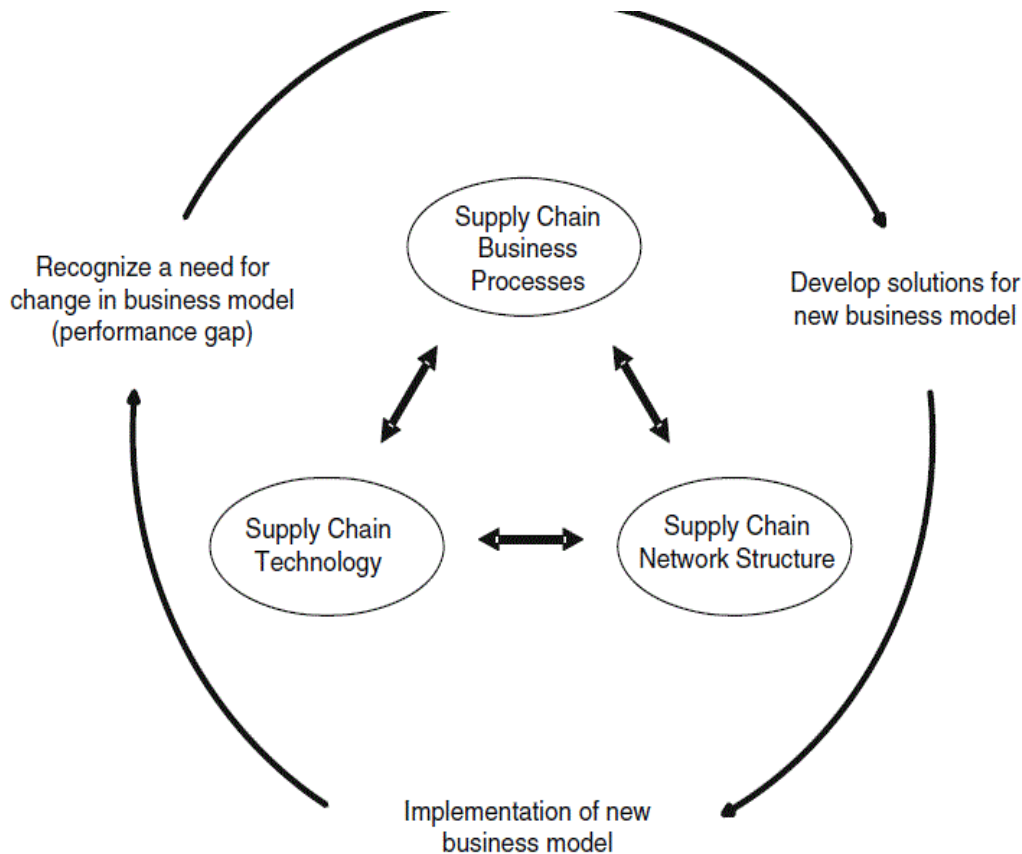


Figure 1: Elements of Supply Chain Management

Source: (Arlbjørn et al., 2011)

P5: Technology, business process and network structure as major elements of sustainable supply chain management.

Integrative models and decision-supporting tools

Firm's operational and managerial decisions have an immediate connection to its environment. Environmental concerns, although, mostly add up the costs and put barriers on manufacturing processes and systems, they also explore new way and opportunities that, if appropriately used, can help in financial benefits and performance improvement as well as make the environmental impact of firm better (Subramanian, Talbot, & Gupta, 2010).

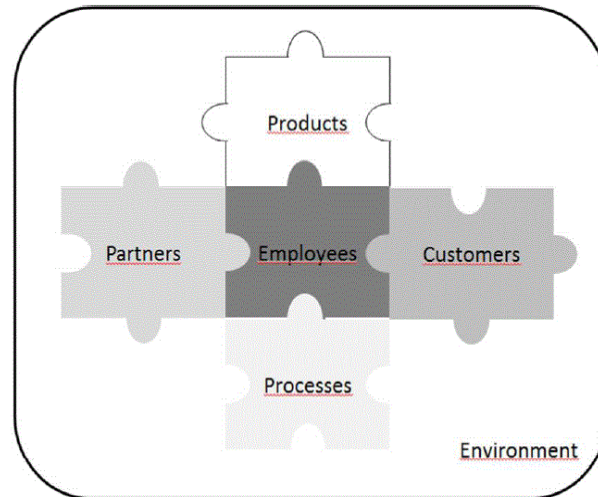


Figure 2: Components of Supply Chain business model management

Source: (Trkman, Budler, & Groznik, 2015)

Gold, Seuring, and Beske (2010) have discussed a logical and practical approach to find out comprehensively assessable organizational environmental affects and concerns for the product life cycle. A diverse and complex numerical programming framework is designed to choose from product and procedures choices while taking into note the trade-offs of production, consistency, and business oriented environmental effects. Moreover, Morali and Searcy (2013) have framed a non-linear numerical programming design from a value maximizing organization's aspect, which can be converted to a decision helping tool for organizations having some environmental objectives and limitations.

P6: Products, partners, employees, process, and consumers are important ingredients of SSM.

P7: for the enhancement of supply chain function, efficiency driven strategies are effective.

Methodological Approach

A. Research Philosophy

Interpretive research philosophy is used in this research study as it suits the requirements of achieving the research purpose and aim. This type of philosophy demands an explanation from the researchers regarding the research components involved i.e. it allows the inclusion of interpretation driven by human concern within the specific context of research. This philosophy complements the applicability of exploratory research (Cheung, Myers, & Mentzer, 2011).

B. Research Approach

Qualitative Research Approach

Qualitative method of research is chosen for conducting this study which is exploratory in nature. Qualitative approach allows the researchers to collect and gather human perceptions, feelings and thinking regarding the

problem area under consideration (Punch, 2009). This method takes more time and individual efforts as compared to quantitative method.

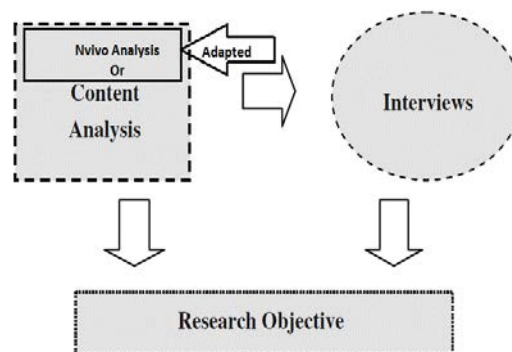


Figure 3: Methodological Approach

Source: (Morali & Searcy, 2013)

A key benefit of this method is that researchers can make use of primary and secondary data both. Under the banner of qualitative method, this study will make use of interviews as data collection technique with an intention to avoid biasness at every level (Marschan-Piekkari & Welch, 2004).

Population and Sampling

Population of this research is professional practitioners in supply chain management organizations operated in Pakistan. Purposive sampling is used as it is deemed to be most appropriate according to the nature of the research as the data is to be collected from supply chain managers according to the specific research objectives (Bryman & Bell, 2015). As we aim to find the issues of SCM and effective sustainable supply chain strategies in context of Pakistan so as per our judgment, supply chain managers are most appropriate to provide this information. A sample of 10 supply chain managers is selected on the basis of researcher's judgment. This is one of the most used and effective method in context of carrying out a qualitative research (Creswell, 2013). Similar kind of sampling method has been used by qualitative research in SCM (Flint *et al.*, 2012).

Sample and sampling criteria

The sample of the research is 10 professional practitioners working in supply chain management organizations operated in Pakistan. The selection criteria of the sample is as follows

- Must have experienced regarding SCM
- Professional practitioners working in supply chain management organizations operated in Pakistan.
- Either male or female
- Minimum tenure of 5 year so that the participant has the understanding of the supply chain management and their terms.
- Single or Married

C. Research Method

Therefore, it is evident that the proposed method of study is interview and qualitative based using which new information will be gathered from the private sector firms of Pakistan involved in supply chain activities. Semi-structured interviews will be preferred in this study.

Data Collection

Semi-structure and qualitative interviews have been conducted in this study for the sake of obtaining deeper view of the supply chain related sustainability issue in Pakistan. Interviews spanned from 25-40 minutes, that is similar to other qualitative research on this topic (Crum *et al.*, 2011; Flint *et al.*, 2012).

This was the most appropriate method to collect that data as it allowed participants to express their views freely in accordance with the ontological and epistemological assumption that the knowledge is subjective and the way to obtain is to talk to people and interact with them (Creswell, 2013; Denzin & Lincoln, 2011). This method was feasible because it enables researchers to extract fresh and diverse information from relevant sources with little margin of biasness (Bryman & Bell, 2015). This also relates with the assumption embedded in ontology i.e. there are multiple thoughts and perceptions that shape reality, and also with assumption embedded in epistemology i.e. knowledge can be extracted by talking to people as it is subjective (Denzin & Lincoln, 2011).

Interview protocol

Wider academic literature was reviewed while developing the interview protocol and a pilot testing was also conducted before implementing it. This step allowed the researcher to amend and modify the interview protocols and the questions included in the interview i.e. related to sustainable supply chain management (see Appendix 2).

Data Analysis

This study has included two forms of analysis i.e. the researcher will use observation which will be for the support of case study analysis. Each participant and its response during the interview will be taken as a case. Audio tape will be used for saving the responses of each respondent during interviews which will make it easy to transcribe it after the interview i.e. for developing a comprehensive overview of responses given by each respondent. The NVivo 11 plus software will be used for analyzing the data collected from interviews of respondents i.e. by producing categories and by exploring inter-relationship between various respects involved (Johnson, Buehring, Cassell, & Symon, 2007). Thematic analysis which will be used in this study “*Thematic analysis is a method for identifying, analyzing, and reporting patterns (themes) within data*” (Braun & Clarke, 2006). Themes are identified from the interview data for generating key idea regarding the effectiveness of sustainable supply chain management and its treatment in the given context.

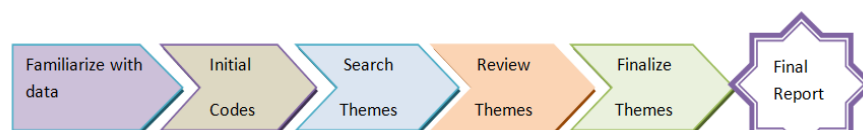


Figure 4: Steps in Thematic Analysis

Source: Adopted from (Braun & Clarke, 2006)

Ethical Considerations

During the course of data collection and interviews, careful consideration will be given to the safety of respondents. Moreover, anonymity and privacy of each respondent will be ensured by the researcher for meeting ethical considerations. The data gathered will strictly be kept confidential and will be utilized for the purpose of research investigation only. The researcher will avoid any kind of fake interpretation related to data.

Interpretation and Discussion

Five main themes emerged after the interview analysis i.e. definition and concept of SCM, issues of SCM, current successful strategies, further successful strategies, ingredients for further betterment of SCM.

Concept of SCM

Participants have sophisticated knowledge about the supply chain management and its factors that involve to finding the supply chain management. During the interview with the participants many things were realize some of them were they have knowledge but they answers according to his/her position in the market but mostly had the mandatory knowledge about it. As one professional stated:

"I think...supply chain is a movement like a chain..., where commodities like products, people, information etc, that flows one direction to other, than can be moved in the given pattern of movement"(R1).

It was seen that many respondents fluently answered when we asked them about the factor of supply chain management.

"In chain management we deliver...the goods to end users...connect to all the action in one transaction, based on technology which links the entire business process from purchase of raw materials until the set of customer purchasing to delivery to all processes that are involved in supply chain management"(R9).

"Supply Chain Management (SCM) is the management of the flow of goods and services. It includes... the movement and storage of raw materials, work-in-process inventory, and finished goods from point of origin to point of consumption or destination..."(R6).

As par discussion with them we came to the point and that was, the supply chain management is integrated with all other businesses as they mentioned in their interviews.

"The whole process... from purchase till the delivery to the customer all processes are involved in supply chain management"(R5).

So the main theme of supply chain management and their factors completely link with every department in any organization in manufacturing or services industry.

Issues regarding Supply Chain Management

When we asked about the issues regarding supply chain management faced by the practitioner, they answered according to the environment that they faced in the workplace. The following participants faced many issues regarding supply chain management.

"Reducing the sales cycle... sales cycle for us is defined as the day money is out to the time we get the money back for a given lot...purchase...product...investment. I would say over the past years one thing I've learned is employ the right staff and have enough staff so that everyone is busy, but there is no choice"(R9).

"Like security issue..., like expensive goods are moved without security also there is no check and balance that either goods are legal or illegal. Transferring the skills to staff and achieve excellence goal across the nation in the field of supply chain management"(R8).

According to him they face these problems because they have lack of decision power some of them wish to resolve all issues but they helplessly said that we are just shuttle cock.

"...As a supply chain management there is just an issue everyone facing is time management, which tell you when products are needed to manufacturer and when it is to be sold. Improved technology is one of the main factors"(R4).

"...Where every country has expanded to the environment, business trends and development of the country, environment. Global supply chain management system to monitor these changes and in every country there is no organization changes"(R3).

Current successful strategies

When I asked about the currently used strategies that put the uplift of the Supply chain filed, following answers I get from the respondents.

"...Each country has its own particular environment, where business trends and growth expands according to the country, environment"(R5).

"In most cases we found gap of communication at all levels. Employees don't have adequate knowledge. Companies need to make more improvements to build a sustainable system like transporters can improve their system by using appropriate or proper vehicles, improve their warehousing, and last but not the least to educate or provide proper training to their employees or staff..."(R3).

The respondent here mentioned many kinds of successful strategies that we can say covers the whole supply chain management:

"Choose... the best one for your organization, and you'll manage your business more effectively. The proper alignment of the supply chain with business strategies essential to ensure a high level of business performance"(R7).

"...Many strategies that I adopted to remove the barriers of slow work that are, structure of the distribution strategies, transportation strategies, the very important is transportation strategies, inventory control, product design and the last one customer value is my fundamental strategy that I use in my organization"(R6).

"...With experienced and skilled professionals supply can help solve problems arising in Pakistan. We need to identify them, requiring skilled and dedicated professionals, in all the main areas"(R4).

"The waste management issues are main concerns in Pakistan that hamper the supply chain efficiency" (R5).

Further successful strategies

Further successful strategies are more important than the others strategies that why our respondents clearly answer the questions related to the main strategies like.

"...A strong and responsive logical basis, must be in place on safety, the coffee warehouses in the car, a significant number of procedures to ensure the safety of the preservative and materials transport"(R10).

"...The supply chain model is well suited for businesses with commoditized products, such as cement steel, cables, tower material industry etc. but low price of the product, proved better quality the consumer, market knowledge the trend and habits of the market is very necessary"(R1).

"In future the supply chains must focus on the building networks with all partners" (R4).

One respondent highlighted the importance of corporate strategy;

"Corporate Strategy...The overall scope and direction of a corporation and the way in which its various business operations work together to achieve particular goals"(R2).

One participant stated that technology is important;

"Modern technology is one of the core ingredients in supply chains of future" (R6).

Ingredients for further betterment of SCM

For the betterment of supply chain management we need many kind of ingredients as we already discussed about it but at this level when respondent's answer precisely like.

"...Sustainability supply chain management involve integrating environmentally and financial viable this is into the companies supply chain lifecycle from product to design development material selection and manufacturing packaging transportation return disposal distribution. All supply chain can be optimized using sustainable practices sustainability in the supply chain in capsule in different no. of priorities you can say conservation of resources reduction of carbon foot print financial saving and viability social responsibility and environmental stewardship"(R2).

The respondent also wishes to share some knowledge like.

"This could include the trainings where you can hire trained staff or you can train the staff you already have in your company, and there are so many things because I am confused, exactly these are the main ingredient, if you are aware of the latest techniques to be used in the supply chain management..."(R3).

"In supply chain management... firms should consider some ingredients such as Planning, Organizing, Leading, Controlling, and Monitoring, last but not the least right man for the right job"(R8).

The respondents are likely to enjoy while giving the answer of our question that's why our many questions have complete and satisfactory answers.

"...Many ingredients involve in to make better supply chain management in multi-sector organization like staff training, development, policies implements thought staff chain, look after the performance of plant and machinery on daily bases"(R5).

Table 1: Matrix Coding Query Results*

*Represents the respective frequencies of Main themes and sub-themes as calculated from running "Matrix Coding Query" in NVivo 11 Plus

	A : Currently Successful strategies in supply chain management	B : Ingredients for sustainable supply chain management	C : Issues of supply chain management	D : Strategies to further improved supply chain management	E : Supply chain management
R1	4	2	2	2	2
R2	1	1	3	4	1
R3	3	1	3	2	1
R4	1	1	2	2	2
R5	1	3	2	1	2
R6	1	1	2	3	1
R7	2	3	1	1	1
R8	3	4	2	6	1
R9	5	2	3	3	2
R10	2	2	3	1	3
Total:	23	20	23	25	16

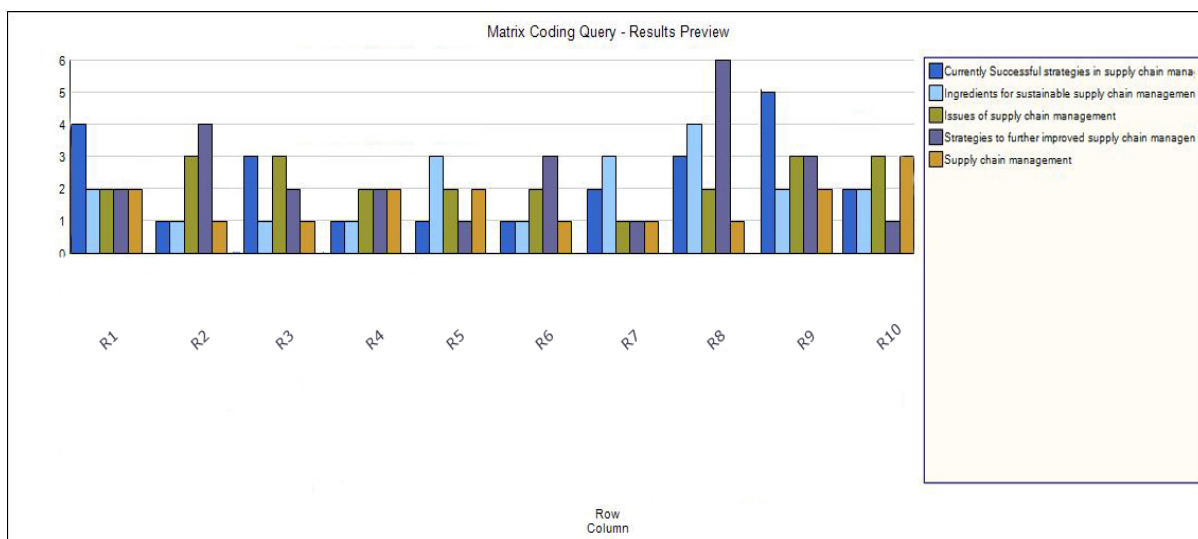


Figure 5: Graphical Representation of Matrix Coding Query Results

On the basis of findings of present research following conceptual model is proposed:

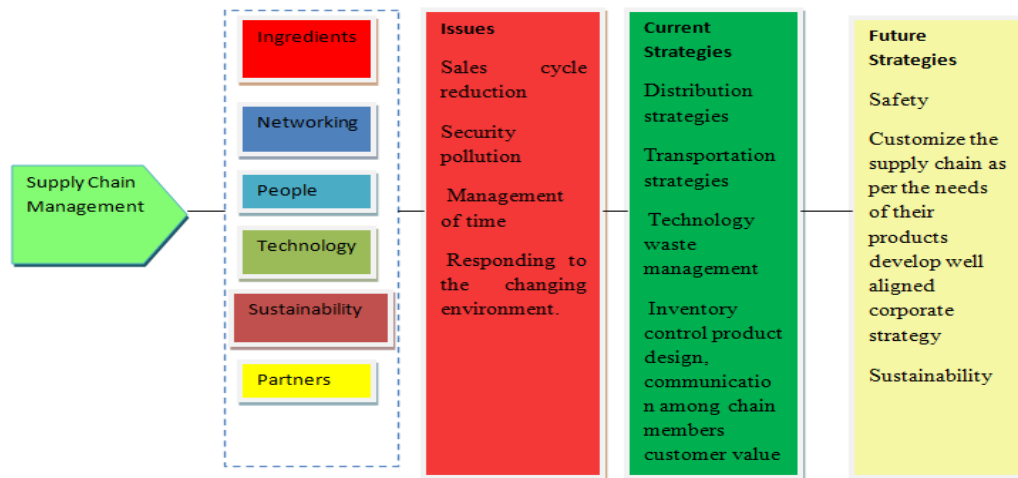


Figure 6: Conceptual Model

III. CONCLUSION

After the analysis of interviews the main concept of Supply chain was identified as the chain management in which companies deliver the goods to end users, connect to all the action in one transaction, based on technology which links the entire business process from purchase of raw materials until the set of customer purchasing to delivery to all processes the main issues included the sales cycle reduction, security, pollution, management of time and responding to the changing environment.

The existing successful straggles were structure of the distribution strategies, transportation strategies; technology, waste management, inventory control, product design, communication among chain members and customer value. Furthermore, it is identified by respondents that every nation should adapt the SCM strategies as per their specific context.

The respondents said that in future the companies in Pakistan must pay more attention to safety, customize the supply chain as per the needs of their products and develop well aligned corporate strategy. It was stated that people and participants in a supply chain are most important factor that ensures its success. It was found that in future the supply chains must be sustainable not only financially but also environmentally. The other important ingredients included the business strategies, networking and communication among partners and technological infrastructure.

It has been concluded from this research study that multi-dimensional and strategic approach is imperative for achieving sustainable supply chain management function in business organizations for the benefit of diverse stakeholders and firm performance. It has been asserted that a significant contribution from the side of human resources, top leadership and effective use of technology is mandatory for smooth functioning and achievement of sustainable supply chain management.

Internet enables pooled supply chain management model and the hub- spoke model of integration discussed and proposed in this study are vital players for making sure that people, information and material are disseminating in a logical, systematic and aligned manner ultimately making supply chain management system

IV. LIMITATION AND DIRECTIONS

Every research faces some kind of limitations; similarly, this research study has also faced some limitations which are important to be mentioned and acknowledged here. The first limitation was in the context of understanding possessed by the researcher about the topic under discussion i.e. the topic discussed is contemporary in nature and researcher did not have much research experience and theoretical understanding about this topic due to which it took much time in developing understanding of this topic by reading wider academic literature. Therefore, this limitation might have reflected on the quality and adequacy of this study. Another limitation was average understanding and experience of the researcher regarding the application of research methods and philosophies.

Another limitation is that the researcher might have missed any significant and useful theoretical perspective or empirical evidence regarding the supply chain management function and its scope along with issues or current trends. Another limitation has been the narrow focus of this study due to which this study might have missed some important components and factors that had the potential to implicate on the findings of this study. Another limitation can be the less focus on the contextual factors such as organizational culture and situation of infrastructure existent in the context of chosen country Pakistan i.e. by considering these and other contextual factors, research findings would have been different. Moreover, any element of biasness from the side of interview participants due to their previous good or bad experiences might have affected the reliability of research findings.

However, a last limitation is attached with the ability of researcher regarding developing interview questions and conducting interviews as any lacking during development of interview questions can lead to less reliable results and findings. Despite coming up with these limitations, this research study is good enough of contributing and adding a value towards the wider academic literature especially in the context of identified research gap.

REFERENCES

- [1] Abbasi, M. (2012). Sustainable practices in Pakistani manufacturing supply chains: Motives, sharing mechanism and performance outcome. *Journal of Quality and Technology Management*, 8(2), 51-74.
- [2] Arlbjørn, Jan Stenøft, de Haas, Henning, & Munksgaard, Kristin Balslev. (2011). Exploring supply chain innovation. *Logistics research*, 3(1), 3-18.
- [3] Braun, Virginia, & Clarke, Victoria. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- [4] Bryman, Alan, & Bell, Emma. (2015). *Business research methods: Oxford University Press, USA*.
- [5] Cheung, Mee-Shew, Myers, Matthew B, & Mentzer, John T. (2011). The value of relational learning in global buyer-supplier exchanges: a dyadic perspective and test of the pie-sharing premise. *Strategic Management Journal*, 32(10), 1061-1082.
- [6] Creswell, John W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches: Sage publications*.
- [7] Crum, Michael, Poist, Richard, Carter, Craig R, & Liane Easton, P. (2011). Sustainable supply chain management: evolution and future directions. *International journal of physical distribution & logistics management*, 41(1), 46-62.
- [8] Denzin, Norman K, & Lincoln, Yvonna S. (2011). *The SAGE handbook of qualitative research: Sage*.

- [9] Flint, Dan, Gammelgaard, Britta, Goffin, Keith, Raja, Jawwad Z, Claes, Björn, Szejczewski, Marek, & Martinez, Veronica. (2012). Rigor in qualitative supply chain management research: Lessons from applying repertory grid technique. *International Journal of Physical Distribution & Logistics Management*, 42(8/9), 804-827.
- [10] Frankel, Robert, Bolumole, Yemisi A, Eltantawy, Reham A, Paulraj, Antony, & Gundlach, Gregory T. (2008). The domain and scope of SCM's foundational disciplines—insights and issues to advance research. *Journal of Business Logistics*, 29(1), 1-30.
- [11] Goffin, Keith, Lemke, Fred, & Szejczewski, Marek. (2006). An exploratory study of 'close' supplier–manufacturer relationships. *Journal of operations management*, 24(2), 189-209.
- [12] Gold, Stefan, Seuring, Stefan, & Beske, Philip. (2010). Sustainable supply chain management and inter-organizational resources: a literature review. *Corporate social responsibility and environmental management*, 17(4), 230-245.
- [13] Heizer, Jay, Render, Barry, & Munson, Chuck. (2016). *Principles of operations management: sustainability and supply chain management*: Pearson Higher Ed.
- [14] Hunt, Shelby D, & Davis, Donna F. (2008). GROUNDING SUPPLY CHAIN MANAGEMENT IN RESOURCE-ADVANTAGE THEORY*. *Journal of Supply Chain Management*, 44(1), 10-21.
- [15] Johnson, Phil, Buehring, Anna, Cassell, Catherine, & Symon, Gillian. (2007). Defining qualitative management research: an empirical investigation. *Qualitative Research in Organizations and Management: An International Journal*, 2(1), 23-42.
- [16] Lifset, Reid, Atasu, Atalay, & Tojo, Naoko. (2013). Extended producer responsibility. *Journal of Industrial Ecology*, 17(2), 162-166.
- [17] Lin, Catherine K, Yan, Linan, & Davis, Andrew N. (2001). Globalization, extended producer responsibility and the problem of discarded computers in China: an exploratory proposal for environmental protection. *Geo. Int'l Envtl. L. Rev.*, 14, 525.
- [18] Linton, Jonathan D, Klassen, Robert, & Jayaraman, Vaidyanathan. (2007). Sustainable supply chains: An introduction. *Journal of operations management*, 25(6), 1075-1082.
- [19] Lofland, John. (1995). ANALYTIC ETHNOGRAPHY Features, Failings, and Futures. *Journal of Contemporary Ethnography*, 24(1), 30-67.
- [20] Marschan-Piekkari, Rebecca, & Welch, Catherine. (2004). *Handbook of qualitative research methods for international business*: Edward Elgar Publishing.
- [21] Massaroni, Enrico, Cozzolino, Alessandra, & Wankowicz, Ewa. (2014). Sustainable supply chain management needs sustainable packaging. An exploratory study. *Paper presented at the Conference proceedings: XXVI Sinergie Conference*.
- [22] Morali, Oguz, & Searcy, Cory. (2013). A review of sustainable supply chain management practices in Canada. *Journal of Business Ethics*, 117(3), 635-658.
- [23] Morana, Joëlle. (2013). Sustainable supply chain management. *John Wiley & Sons*.
- [24] Punch, Keith F. (2009). Introduction to research methods in education. *Sage*.
- [25] Savaskan, R Canan, Bhattacharya, Shantanu, & Van Wassenhove, Luk N. (2004). Closed-loop supply chain models with product remanufacturing. *Management science*, 50(2), 239-252.
- [26] Seuring, Stefan. (2013). A review of modeling approaches for sustainable supply chain management. *Decision support systems*, 54(4), 1513-1520.
- [27] Seuring, Stefan, & Müller, Martin. (2008). From a literature review to a conceptual framework for sustainable supply chain management. *Journal of cleaner production*, 16(15), 1699-1710.
- [28] Seuring, Stefan, Sarkis, Joseph, Müller, Martin, & Rao, Purba. (2008). Sustainability and supply chain management—an introduction to the special issue. *Journal of cleaner production*, 16(15), 1545-1551.
- [29] Souza De Souza, DV. (2015). A conceptual framework and best practices for designing and improving construction supply chains. *University of Salford*.
- [30] Subramanian, Ravi, Talbot, Brian, & Gupta, Sudheer. (2010). An Approach to Integrating Environmental Considerations Within Managerial Decision-Making. *Journal of Industrial Ecology*, 14(3), 378-398.
- [31] Trent, Robert J. (2004). What everyone needs to know about SCM. *SUPPLY CHAIN MANAGEMENT REVIEW*, V. 8, NO. 2 (MAR. 2004), P. 52-59: ILL, 8(2).
- [32] Trkman, Peter, Budler, Marko, & Groznik, Aleš. (2015). A business model approach to supply chain management. *Supply Chain Management: An International Journal*, 20(6), 587-602.

Appendices

Appendix 1: Word Count Query Results



Appendix 2: Interview Protocol

A. Interview Protocol

Date: _____

Time: _____

Location: _____

Interviewer: _____

Interviewee: _____

Release form signed? _____

Notes to interviewee

Thank you for your participation. I believe your input will be valuable to this research and in helping grow all of our professional practice.

Approximate length of interview: 30 minutes, six major questions.

Most interviews were conducted at the interviewee's workplace, although a few of the interviewees suggested alternative meeting places, such as a coffee shop or his/her Home. All study participants were assured that their names and the names of their past employers and new companies would be kept confidential. All Names used in this paper are fictitious.

B. Purpose of the study and research questions

A. Following are set of objectives and research questions developed for this study:

The purpose of this study is to examine the Sustainability of supply chain management under-researched subject of the Supply chain management in Pakistani organizations.

Research Question

1. In your view, what is supply chain management?
2. In your view, what is the hottest issue regarding supply chain management in current scenario? Also how will it be addressed?
3. What are the strategies that uplift you in supply chain field?
4. What are the strategies/tips that you consider effective in supply chain management improvement?
5. What are the ingredients that you consider very important in a framework to manage supply chains? Or what are your views, for contextualized framework to manage multi-sector supply chains in a group business?

Methods of disseminating results

The interviews were transcribed and then entered into the NVivo analysis system. The interview content was analyzed using the categorization and sub-categorization process outlined by (Lofland, 1995).

C. Closing

Thank the participant and settle any question or concern. Tell them that their feedback will be needed in the course of research. Close the recording device and dismiss the interview.

Sources: Developed from extensive literature review from (Souza De Souza, 2015).