

# Exploring Determinants of Organizational Engagement in Supply Chain Management an Integrated Approach: A Comprehensive Literature Review

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**Abstract:** The focus of this research is to explore the determinants that facilitate or inhibit organizations from engaging in supply chain management initiatives. And indeed, the literature includes an abundance of studies dealing with that. For the purpose of this study, a literature review delineates the main internal and external categories of factors influencing SCM practices. They are organizational behavior, a framework of control, customer-acquisition dynamics, competitive intensity, and societal expectations. Withal, there has been little research on the role of suppliers, which can act as facilitators in areas where SCM integration could improve firm performance. Cost constraints and a perceived lack of legitimacy are intended to be internal obstacles, whereas regulatory constraints, lack of supplier uptake, and context-dependent conditions are external scope limitations. Due to such differentiation, this research takes an exploratory approach and uses previous literature and researchers' insights in addition to interviews because the issues in the supply chain are disciplinary and integrated. Encouragingly, across the organizations, supply chain management is seemed to be more influenced by external rather than internal drivers. It is again concluded from the research that health systems need to work more efficiently and effectively to meet these growth targets. Therefore, it is necessary to look for innovative solutions and appropriate modern ways to ensure that the changing needs for health care and health systems are met.

## 1 INTRODUCTION

Side flicker the ever-growing demands of customers, on the other – the imperatives of the company's growth and profitability. This image makes it possible to reveal the dual nature of the SCM. It constitutes a business process: encompassing all tasks involved in regulating the movement of products, services, and information from suppliers' suppliers to customers' customers. The supply chain is depicted as a rope, highlighting tangible outcomes: revenue growth, asset optimization, and cost management.

Therefore, as the degree of coordination between departments affects a company's success directly or indirectly also its SCM will be influenced. When SCM is effective, an organization will flourish, and the service delivery system will be superior. However, when organizational changes are made to SCM processes, the instability that follows makes functioning across departments chaotic. Eventually,

this turns into an existential threat to the company (Thomas 2015). SCM is the failure of pinpointing the sectors needing transformation, and that makes the development of a supply chain transformation plan critical. The word "supply chain" was developed in the early 1980s to characterize a company's various actions to obtain and handle supplies. SCM is a system of organizations, operations, and business operations that facilitate products and services in various sectors by providing and maximizing profits in an enterprise. Each business will operate in various industries or within a comprehensive supply chain system, and each has a distinct purpose (Datta 2011).

There are three basic steps in SCM which a company needs to decide before implementing it.

- 1) Suppliers (who supplies the raw product/material)
- 2) Manufacturer (who assemble or arrange or manufacture the raw material and passed it to next step)

3) Customers ( the end use of the product)

These steps may change as per of type of company or sector in which supply chain needs to apply.

There are so many sectors today where SCM functions logically.

**Supply Chain Influencing Factors:** Even for the industry SCM is the best tool for providing better service to the customers and enhancing the profit for itself, SCM is standing over some pillars. These pillars always influences to the SCM. Profitable SCM and poor SCM all are the reflection of these pillars.

Table 1: List of sectors where SCM is in functioning today.

Sector	SCM applies in terms of as
Communication	information transfer
Manufacturing sector	Material handling
Field Marketing	Transportation
Online marketing	Transportation
Online services	Transportation
Production	Material handling
Logistics	Transportation and services
Banking	Services
Education	Services
Health care sector	Services
Wall-Marts and Malls/shopping complexes	Product handling and services
Traffic system	transportation
Railways	Transportation and services
Metro Train	Transportation and services

So the effecting “SCM is nothing but the managing balance over these pillars in a best of best way” (Figure1a & b, and Figure 2).

Table 2: Supply Chain implementation year to year.

The earliest form of supply chain was likely the barter system.	1904
The origins of outsourcing can be traced back to instances such as Charles S. Rolls acting as a selling agent for cars manufactured by F. Henry Royce.	1960-1975
The foundational understanding of Supply Chain Management (SCM) emerged during its initial phase, characterized by an inventory 'push' era that emphasized the physical distribution of finished goods.	1975-1990
Businesses started transitioning from an inventory push model to a customer pull approach.	1980
Wal-Mart pioneered the introduction of the concept of cross-docking.	1985
The internet revolutionized business distribution systems.	1996
The concept of e-commerce redefined the business landscape.	1998
Since 1998, Supply Chain (SC) involvement has expanded into numerous sectors including services, production, material handling, healthcare, logistics & distribution, and various other integrated fields.	

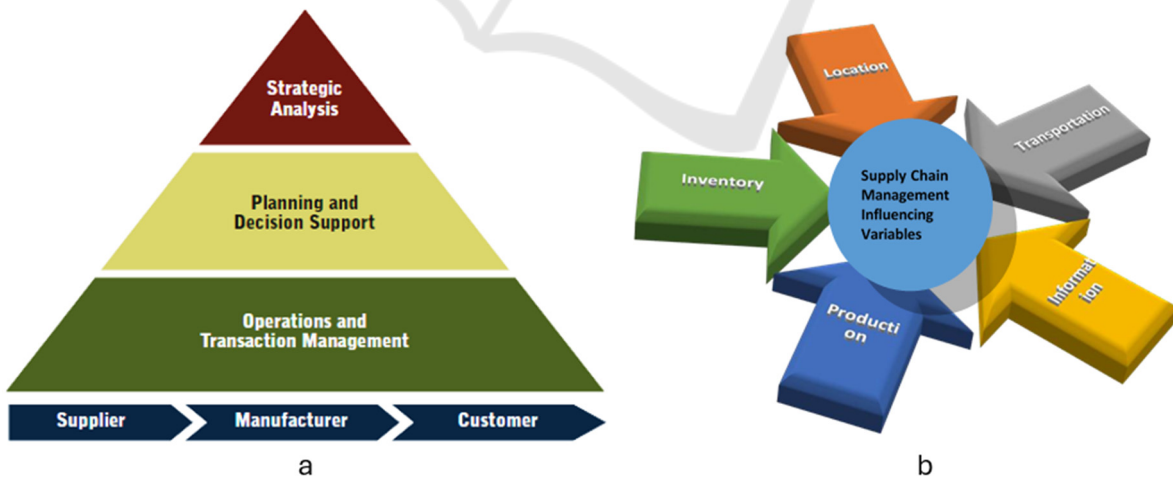


Figure 1: a. SCM Steps, b. SCM influencing factor.

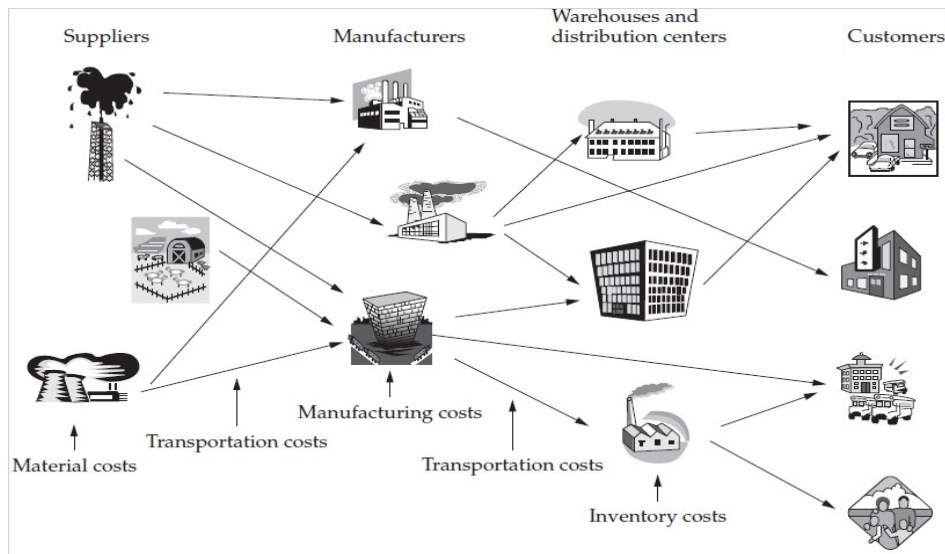


Figure 2: The hierarchical network of SCM.

## 2 LITERATURE REVIEW

SCM has evolved directly or indirectly in qualitative performance of industry over the last 20-25 years. Studies over the past researchers have investigated the relationships qualitative performance with supply chain management. Therefore an integrating approach of SCM upon the different sector apart of the manufacturing fields has been useful and famous over the researcher’s perspectives and that’s why integrated SCM will be important for future competitiveness (Shah 2023).

In the literature researchers found a number of fields where SCM has been involved a part of the common fields like manufacturing, information and material handling etc. So many integrated approaches are using by the researchers in various fields. Accept these, there are many review papers which also has been reviewed by the author during the research. The scope of supply chain performance measurement studies includes a variety of models, methods, and frameworks. There are models such as Supply Chain Partnership , Supply Chain Integration , Supply Chain Interaction, Supplier Relations and Selection , Supply Chain Information , and Quality Improvement (Joshi 2022).

Supply chain quality management is described as all partner organizations in the supply channel formally coordinating and integrating business processes. The primary goal is to measure, analyze, and continuously enhance product reliability, serviceability, and customer satisfaction at the intermediate stages and final consumption stages.

Quality-SCM is integral to academic research and industrial practice, and a conceptual framework for Quality-SCM will enhance quality initiatives in the field of SCM. Standardization, through norm adherence (for example, to ISO 9001:2000) to establish management systems, has a significant role in identifying critical supply chain processes and Drivers (Robinson 2005). TQM and supply chain management systems have a lot in common because of a common goal of satisfying customers. Effective quality management in the supply chain can be defined through three central dimensions: supplier selection, supplier, and supplier development, and supplier integration. The Quality and Technology framework highlights the relationship between supply quality, supplier quality, and buyer quality. Quality relationships between suppliers and buyers can be captured in the terminology and are defined in two stages. The first stage is supply chain quantity, a collection of buyer-specific qualities, and the second stage is supply chain technology, a reflection of supply quality (Mahdiraji 2012).

A quality management QM model recommended by Kaynak and Hartley emphasizes internal and external integration to drive quality performance (Kaynak 2008). The quality performance stems from studies that highlight initiatives to focus on improving and controlling the supply chain. Integrated SCM systems led to attempts to improve the quality of all processes in the supply chain. These initiatives resulted in cost reductions, better use of resources, and increased process performance. Proposed conceptual models for measuring quality of service in the supply chain

identified areas of future research on the selected domains of service quality. They also played a vital role in other organizational components. The performance measurement systems help direct actions and enable the implementation of strategies that drive the quality of the organization. In measuring and relying on performance measurement, the data is commonly utilized in public reporting, provider incentive programs, and quality improvement initiatives. Efficiency of performance depends on how prepared the organization's culture is across its life cycle. Performance measurement systems are balanced and dynamic systems that aid decision-making processes by collecting, processing, and analysing data, focusing on efficiency and effectiveness (Kaynak 2008).

The next approach to be considered as dynamicity. Dynamicity is related to the adaptability and capability of changes in the established system. It means that the system can be changed and adjusted with time and in response to changes in the internal and external environment. The first two perspectives ensure that the measurement system can change and met the current needs and the challenging market conditions. The supply chain in the healthcare sector is an inherently complicated system due to its direct influence on patient care. Poor SC performance is a significant source of avoidable cost for healthcare delivery facilities and could account for a considerable portion of their operating expenditure. Other problems associated with SC in the health sector include communication failure, patient accidents, long waiting times, and inadequate integration. Therefore, integration between businesses units and facilities is essential to providing high-quality patient outcomes. The data quality is another significant problem in the health sector. The lack of data quality reduces the potential of SC data to address the system's problems, as to ensure that better data quality, SC management must follow quality-related procedures (Burgess 2023, Emir 2024).

### 3 GAPS IN LITERATURE

Reviewed current researches in SCM, Integrated SCM, and performance management and identified

some themes which are actually variables of SC. The variables under consideration encompass customer focus, quality practices, supplier relations, leadership, HR practices, business results, and aspects related to safety, transportation, healthcare, and artificial intelligence. Even after the literature review of many research papers author made a survey also on SCM. Several industries (Dell, Amazon, Saras Dairy, Amul Dairy, Local manufacturers & suppliers) directly and indirectly are involved in that survey. Survey initiated with direct meeting to the departmental head and workers and their customers of respective organization as well as at some stage telephonic survey has also been conducted. Likert scale of 1 to 5 marking is used for rating the SCM performance in the respective organizations and the service received by the customers of respective organization (Table 3).

Table 3: Some important organizations which are involved in survey.

Name of Organization	ICICI Bank	LOCAL SUPPLIERS
INFOSYS	Axis Bank	LOCAL MANUFACTURES
HCL Info systems	DELL	BOSCH
Wipro	GENPACT	Apollo Hospital
Life Insurance Corporation of India	AMUL DAIRY	APEX HOSPITAL
HDFC Bank	SARAS DAIRY	FORTIS HOSPITAL
EHCC HOSPITAL	MAHATMA GANDHI MEDICAL COLLEGE	SWAI MAN SINGH HOSPITAL

Organizations on table can be clustered in the five groups as per of their service provided to the customers for representing the responses of the customers. Total score from all the responses is counted separately for the services provided with respective questions.

Total Score = [rating 1x no. of customers who rate it as 1] + [rating 2x no. of customers who rate it as 2] + [rating 3x no. of customers who rate it as 3] + [rating 4x no. of customers who rate it as 4] + [rating 5x no. of customers who rate it as 5].

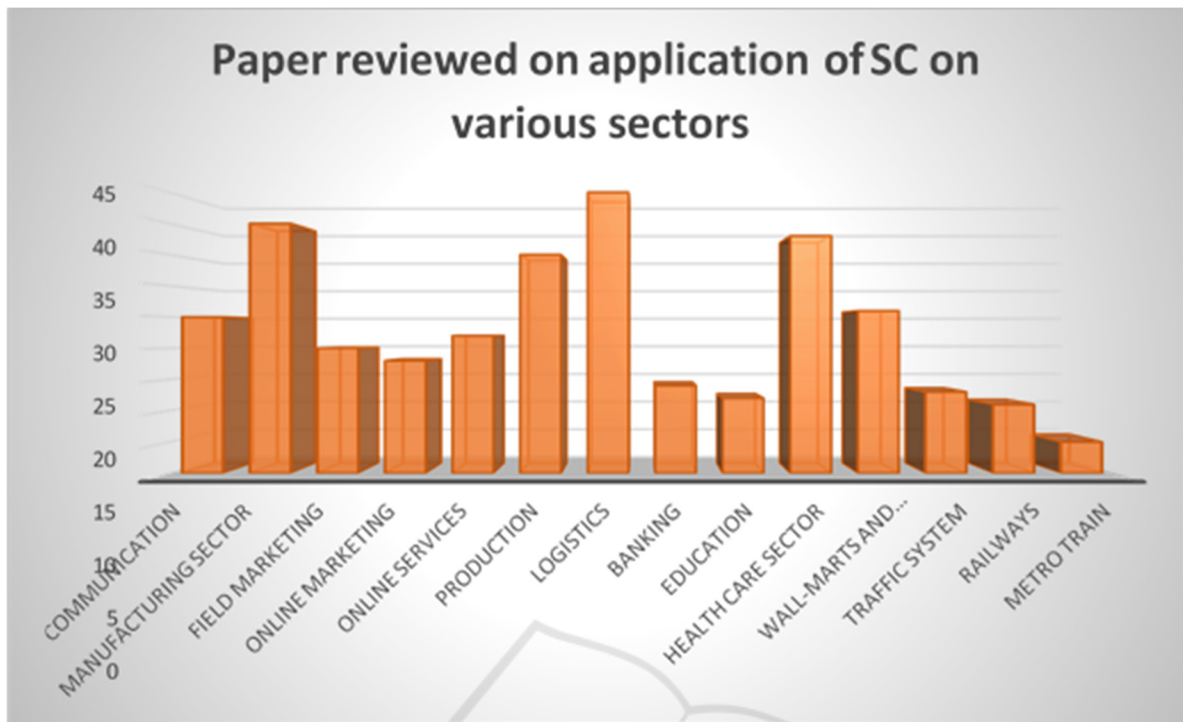


Figure 3. Sector view segregation of SC reviewed papers.

Question Asked for rating performance or serviceability								
Groups of services provided to the customers	Need to improve serviceability with proper and simple arrangements	No need any improvement in serviceability	External Factors are responsible for poor serviceability	Internal Factors are responsible for poor serviceability	Working stress is responsible for poor serviceability	Money is responsible for poor serviceability.		Total Score
Online marketing	78	50	25	22	10	35		220

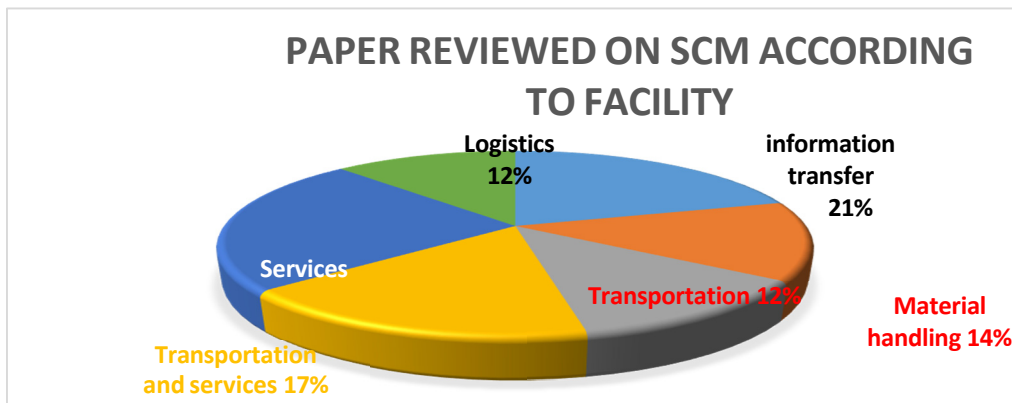


Figure 4: Paper reviewed on SCM according to facility (Pie Chart).

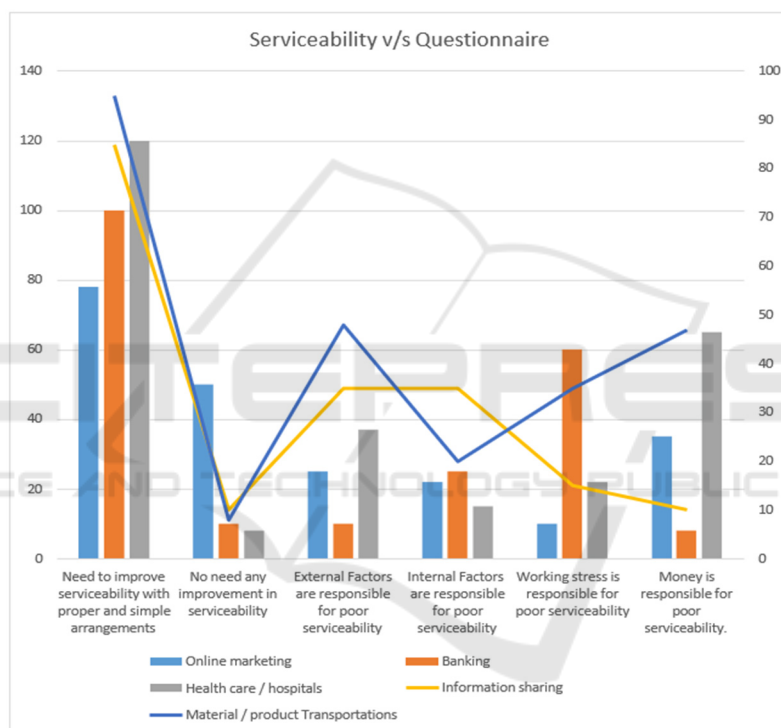


Figure 5. Serviceability Questionnaire.

Banking	100	10	10	25	60	8	213
Health care / hospitals	120	8	37	15	22	65	267
Information sharing	85	10	35	35	15	10	190
Material / product Transportations	95	8	48	20	35	47	253
Total Score	478	86	155	117	142	165	1143

Based on the available literature and survey results, I would like to propose the future research direction in supply chain quality management. Much of the supply chain's aspects, such as performance, coordination, integration, communication,

leadership, and best practices, have been studied in many industries. However, what has not been given is the serviceability quality of a supply chain in the context of the healthcare industry. One may notice that, while studying product quality, most research



has been conducted on improving performance and time to patient in the healthcare supply chain. The existing supply chains such as the one in hospitals and pharmacies do not serve the customers well; that is, the patients and, hence, need supply quality improvement. This is because imported supply change management practices, perhaps implemented as an integrated approach, can help increase this performance

#### 4 CONCLUSIONS

Supply Chain Management is a set of integrated processes that enables the transformation of raw materials into valuable products and their distribution to customers via a systematic channel. SCM comprises a network of facilities and distribution mechanisms, such as the process of procurement, change of structure from materials, and circulation of the complete product. The growth of the healthcare industry in India is significant, driven by the high population growth, significant government outlay on health, and raising per capita income. The growth rate of the industry creates the necessity to tackle such challenges as an ability to keep up with increasingly more demands of customers, an ability to adapt to the market's demands for pharmaceuticals and medical devices, as stated by other researchers and policymakers. There is little doubt that a more efficient system's performance is a necessity for economies to hit growth targets. As such, modern approach and innovative solutions are a must to meet the increased demands of the system and tackle its evolving challenges. The purpose of this study is to present the SCM's concept, its critical components, and the relationships among them with an organizational performance.

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