A Study Paper on the Scope of Supply Chain Management (SCM) in Small Scale Production Units of Rajkot

Dr. Mehul Patel[1], C.P.Patel[2], F.H.Shah[3]
[1]*Assistant Professor, Commerce College, Anand*

***Purpose*: This paper explores the scope of SCM by employing ERP software especially by Small Scale Production units of Rajkot, Gujarat.**
***Methodology*: A structured questionnaire is prepared in English. The two level data have been collected and analyzed primary and secondary data. Primary data have been collected from the respondents and secondary data from various reviews and researches. Finally, findings and conclusions are drawn from the analysis. 50 respondents were examined.**
***Findings:* The findings of the research explore that for small and unorganized sectors, employing ERP Software for better SCM is proven to be costly matter. Moreover, the majority of the production units are engaged in B2B (Business to Business) model wherein industrial customers are having entirely different set of requirements.**
***Research Implications*: Based on the existing outcomes of the research, the further research can be extended to state and national level in the same category. Outcome of this can be of great use to strategy makers.**

***Index Terms*- : Enterprise Resource Planning, SCM, Small Sector Units, B2B Model, Cost to Company.**

INTRODUCTION

India is artistic with huge amount of natural resources and they get exhausted as the industrial growth but the involvement in negative environment is due to unorganized sectors due to compromising fulfillments. In the same way, majority of production units are largely a vendor of large sector unit or may be equipment supplier. They are more involved in doing business to business job work so, for them direct consumer involvement or interaction is less. Industry has very specific requirements and that are well met by the small manufacturing units. There are advanced software available in the market like SAP, Tally, ERP, Etc. but the use and application of such advanced software is always an optional demand for the small manufacturing units.

REVIEW OF LITERATURE

Defining supply chain management by John T. Mentzer, William DeWitt, James S. Keebler, Soonhong Min, Nancy W. Nix, Carlo D. Smith, Zach G. Zacharia
A management construct cannot be used effectively by practitioners and researchers if a common agreement on its definition is lacking. Such is the case with the term "supply chain management"—so many definitions are used that there is little consensus on what it means. Thus, the purpose of this paper is to examine the existing research in an effort to understand the concept of "supply chain management." Various definitions of SCM and "supply chain" are reviewed, categorized, and synthesized. Definitions of supporting constructs of SCM and a framework are then offered to establish a consistent means to conceptualize SCM. Antecedents and consequences of SCM are identified, and the boundaries of SCM in terms of business functions and organizations are proposed. A conceptual model and unified definition of SCM are then presented that indicate the nature, antecedents, and consequences of the phenomena.

Issues in Supply Chain Management by Douglas M Lambert Martha C Cooper
Successful supply chain management requires cross-functional integration and marketing must play a critical role. The challenge is to determine how to successfully accomplish this integration. We present a framework for supply chain management as well as questions for how it might be implemented and

questions for future research. Case studies conducted at several companies and involving multiple members of supply chains are used to illustrate the concepts described.

Supply Chain Management and Enterprise Resource Planning

SUPPLY CHAIN: supply chain refers to the flow of materials, information, payments, and services from raw material suppliers, through factories and warehouses, to the end customers. A supply chain also includes the organizations and processes that create and deliver products, information, and services to the end customers. It includes many tasks such as purchasing, payment flow, materials handling, production planning and control, logistics and warehousing, inventory control, and distribution and delivery.

SUPPLY CHAIN MANAGEMENT: The function of supply chain management (SCM) is to plan, organize, and coordinate all the supply chain's activities. Today the concept of SCM refers to a total systems approach to managing the entire supply chain. SCM is usually supported by IT (see Kumar, 2001; Hugos, 2002; and Vakharia, 2002). The topic of supply chain management was found to be the number 1 priority of chief information officers (CIOs) in 2001, and their number 3 priority in 2002 (see Morgan Stanley, 2001, 2002).

SCM SOFTWARE: SCM software refers to software intended to support specific segments of the supply chain, especially in manufacturing, inventory control, scheduling, and transportation. This software concentrates on improving decision making, optimization, and analysis.

E-SUPPLY CHAIN: When a supply chain is managed electronically, usually with Web-based software, it is referred to as an e-supply chain. As will be shown in this chapter, improvements in supply chains frequently involve an attempt to convert an organization's supply chain to an e-supply chain—that is, to automate the information flow in the chain (see Poirier and Bauer, 2000).

SUPPLY CHAIN FLOWS: There are three flows in the supply chain: materials, information, and financial flows.

- Materials flows. These are all physical products, new materials, and supplies that flow along the chain. Included in the materials flows are returned products, recycled products, and materials or products for disposal.
- Information flows. All data related to demand, shipments, orders, returns, schedules, and changes in the above are information flows.
- Financial flows. Financial flows include all transfers of money, payments, credit card information and authorization, payment schedules, e-payments (Chapter 5), and credit-related data. In service industries there may be no physical flow of materials, but frequently there is flow of documents (hard and/or soft copies). Service industries, according to the above definition, fit the definition of a supply chain, since the information flow and financial flow still exist. As a matter of fact the digitization of products (software, music, etc.) results in a supply chain without physical flow. Notice however that in such a case, there are two types of information flows: one that replaces material flow (e.g., digitized software), and one that is the supporting information (orders, billing, etc). In managing the supply chain it is necessary to coordinate all the above flows among all the parties involved in the supply chain (see Viswanadham, 2002).

BENEFITS: The goals of modern SCM are to reduce uncertainty and risks in the supply chain, thereby positively affecting inventory levels, cycle time, business processes, and customer service. All these benefits contribute to increased profitability and competitiveness, as demonstrated in the opening case. The benefits of supply chain management have long been recognized both in business and in the military. In today's competitive business environment, the efficiency and effectiveness of supply chains in most organizations are critical for their survival and are greatly dependent upon the supporting information systems.

SIGNIFICANCE OF THE STUDY

The study contributes to the knowledge of the researchers as well as provides much needed details

to the software designers. The findings of the present study would be of use to large and small manufacturers about the conception and perception about various software.

RESEARCH OBJECTIVES

(1) To study the perception of Small Manufacturers about the use and application of industry used software.
(2) To determine the most influential factor in the decision of buy or not dilemma.
(3) To understand the importance of SCM from small manufacturers view point.
(4) To find out the reasons of slow penetration of use of advanced software.
(5) To understand the influence of various variables on the decision.

ANALYSIS: (Only few are tabulated)

1. Annual Turnover of your Organization.

Range (In Lakhs)	Respondents	Percentage
1 -20	07	14%
21-35	23	46%
36-55	03	06%
56- Onwards	17	34%
Total	50	100%

2. Core Business Activity.

Input	Respondents	Percentage
Job Work	25	50%
Assembling	05	10%
Repair & Return	05	10%
Maintenance	15	30%
Others (Specify)	00	00%
Total	50	100%

3. Business Model

Input	Respondents	Percentage
Business to Business (B2B)	30	60%
Business to Consumer (B2C)	05	10%
Business to Government (B2G)	07	14%
Mix of all	08	16%
Total	50	100%

4. Organization Structure

Input	Respondents	Percentage
Highly Formal & Structured	07	14%
Formal & Structured	07	14%
Informal	25	50%
Mix of all	11	22%
Total	50	100%

FINDINGS

1. Major small manufacturing units are involved in job work doers.
2. Such units operate mainly on very small finance fund.
3. There are very few highly formal units in this category.
4. Majority of them are involved in business to business and business to government business model.
5. Majority of them are male entrepreneurs.
6. They would avoid going directly into business with consumers.
7. Awareness about ERP & SCM is almost negligible.

CONCLUSION

1. Proper training is important to motivate small manufacturers for using advanced software like ERP.
2. They should be motivated to go for consumer products as they fetch more profits.
3. Such units should start few products with their own brands.
4. The organizational structure should be made formal.
5. The pay structure and employee benefits shall be made transparent and just.
6. Every small entrepreneur should adopt innovation not as immediate cost but also as a real long term benefits.

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