

Understanding and Knowledge of the Demand-Supply Chain Management (DSCM): A Logistic Approach

* Dr. Priti Ranjan Majhi

* Professor & Dean in Management Studies, Regional College of Management, Bhubaneswar-751023, Odisha, India

Abstract

Aim of this research is to enhance the current understanding and knowledge of the demand-supply chain management (DSCM) concept by determining its elements, benefits, and requirements, as well as by analyzing key elements of the concept. This research has established that the main elements of DSCM include market orientation, coordination of the demand and supply processes, viewing the demand and supply processes as being equally important, as well as value creation, differentiation, innovativeness, responsiveness, and cost-efficiency in the demand and supply processes. It has also been revealed that the main benefits of DSCM include enhanced competitiveness, enhanced demand chain performance, as well as enhanced supply chain performance, while the main requirements of DSCM include organizational competences, company established principles, demand-supply chain collaboration, and information technology support. A key element of DSCM further investigated is differentiation focused supply chain design.

This research has further analyzed a demand-supply oriented management approach. Such a management approach stresses that the demand processes and the supply processes have to be coordinated and directed at an overlying level, in order to gain and sustain a competitive advantage in competitive and fragmented markets. This research provides researchers and practitioners with insights into how to develop a demand-supply oriented business.

Keywords: Market orientation, Coordination of the demand and supply processes, Cost-efficiency, SC Logistics and FMCG India

Introduction

In recent years, individual suppliers were successful to meet the requirements of their customers in an efficient and effective way. Depending on the innovative power, there are differences between types of industry and their ability to satisfy their customers. In the meantime for most companies the individual flexibility and agility has reached a saturation level: high efforts and high costs have to be spent to satisfy customers' demands. The rise of Demand –or Demand driven- and Supply Chain Management (DSCM) can be explained by the understanding that only combinations of companies are able to meet customer requirements in a more efficient and better way than individual companies can realize. Collaboration between suppliers, manufacturers and retailers can improve the number of satisfied customers by reducing lead-times, improving service levels and decreasing costs. Customers and competitors force companies to co-operate with each other in one or more chains or networks. For some companies this way of co-operation is the last post to continue their existence. Other companies believe that DSCM is an enormous opportunity to redefine their missions and to introduce innovative types of constellations to meet customers' demands on a high level in chaining market conditions. This paper is distinguished in: (1) Partnership in supply chain; (2) Demand & Supply; (3) Four stages in SC Logistics; (4) FMCG Sectors in India; and (5) Findings and Conclusion.

'To be a prime participant in the consumer replenishment process, requires arrange of capabilities bigger than a single enterprise'. They expect the rise of a number of chains

or networks in which an individual company only accounts for 'best of class' that means the contribution of activities in which the company is excellent. Although the design of a chain is the first strategic step, the implementation, planning and control and functioning of the chain are equal important steps. Or in terms of FMI: 'The dysfunctional supply chains of today cannot serve the consumer of 2005'. They distinguish a number of different chains, but are not satisfied about their operations. We conclude that both the design and the operations of a supply chain are closely related to be successful in the implementation of DSCM-concepts.

Partnership in Supply Chains

Handfield and Nichols (1999) argue that integrated supply chain management is becoming recognized as a core competitive strategy. As organizations continuously seek to provide their products and services to customers faster, cheaper and better than the competition, managers have come to realize that they cannot do it alone; rather, they must work on a cooperative basis with the best organizations in their supply chains in order to succeed.' The success of SCM will depend upon the choice of the specific partners in the supply chain and on the way in which they co-operate efficiently and effectively with each other. It cannot be denied that different functional areas try to satisfy customer demands as good as possible. Especially the marketing-function builds a respectable reputation from this point of view. This customer-orientated view is also underwritten from the customer service theory within the logistics function. Unless this hopeful sign; we conclude that customer orientation is insufficient in a number of industry-types. Even within companies, there exists a continuous battle between functional areas about customer responsibility: agreements with customers are frequently transferred from one function to another.

In Business Sciences, the target is to integrate the different functional areas within one organization. The tuning of the policy of a Research & Development department on the policy of a marketing department has to be positioned as an example of a problem in Business Sciences. Handfield and Nichols (1999, p. 153) conclude on Business Sciences "functional capabilities (R&D, manufacturing, marketing, technology) are enablers for success, but are no longer sources of competitive advantages, because they can all be replicated in time. SCM provides a means to achieve a definitive competitive advantage." Supply Chain Management broadens the scope: The integration of decisions within and between companies in a chain is the main mission. Information flows, financial flows and goods flows have to be integrated from a multi-company point of view. This means that SCM regards the activities of functional management and of general management in each company. In other words: a manager can and may no longer restrict himself to the control of his own department or his own company.

Supply Chain Management Organisation

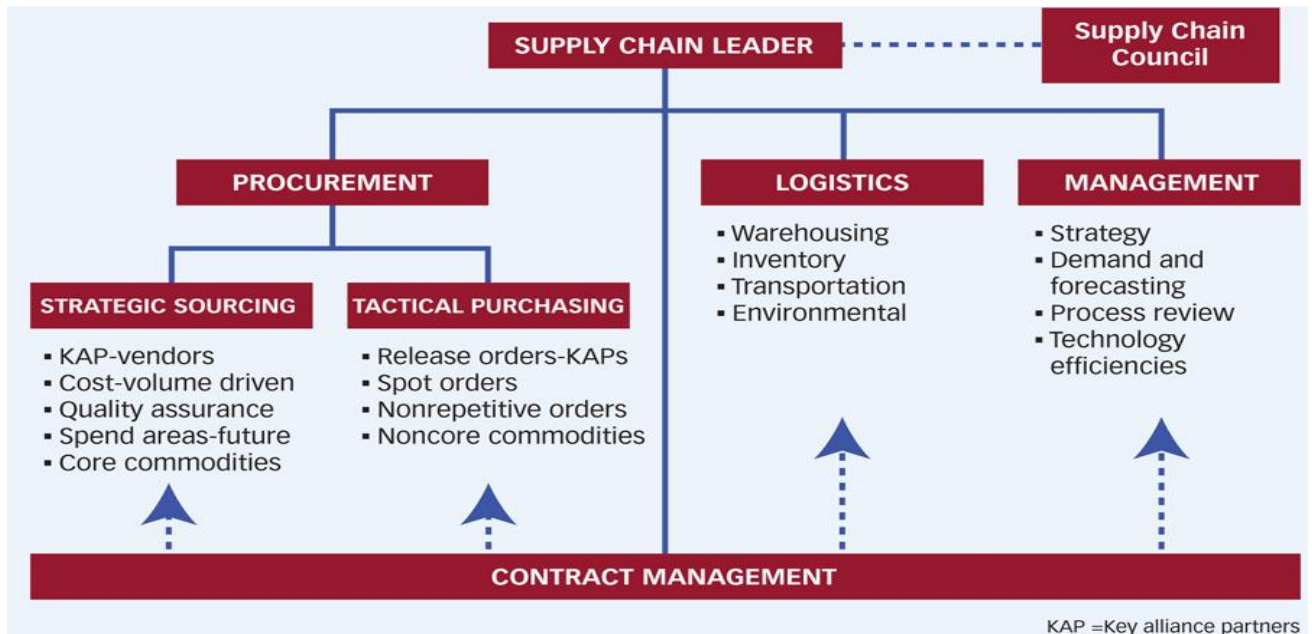


Fig-1: Supply Chain Management Organization

Competitive advantages, because they can all be replicated in time. SCM provides a means to achieve a definitive competitive advantage. "Supply Chain Management broadens the scope: The integration of decisions within and between companies in a chain is the main mission. Information flows, financial flows and goods flows have to be integrated from a multi-company point of view. This means that SCM regards the activities of functional management and of general management in each company. In other words: a manager can and may no longer restrict himself to the control of his own department or his own company.

Functional and general managers have to be involved in the control of network relations in the direction of customers and suppliers. Depending on their starting point (market, logistics, purchasing or ICT) in literature a number of different definitions on SCM have been formulated (Gattorna, 1998). In our formal definition on SCM we will argue that a supply chain is only defined when two interfaces are existent; for these interfaces at least three parties are necessary.

Activity and Function of Demand & Supply Chain Management

Level	Function
Strategic Level	<ol style="list-style-type: none"> 1. Strategic network optimization, including the number, location, and size of warehousing, distribution centers, and facilities 2. Strategic partnerships with suppliers, distributors, and customers, creating communication channels for critical information and operational improvements such as cross docking, direct shipping, and third party logistics 3. Product life cycle management, so that new and existing products can be optimally integrated into the supply chain and capacity management activities 4. Information technology chain operations 5. Where-to-make and make-buy decisions 6. Aligning overall organizational strategy with supply strategy 7. It is for long term and needs resource commitment
Tactical Level	<ol style="list-style-type: none"> 1. Sourcing contracts and other purchasing decisions 2. Production decisions, including contracting, scheduling, and planning process definition 3. Inventory decisions, including quantity, location, and quality of inventory 4. Transportation strategy, including frequency, routes, and contracting 5. Benchmarking of all operations against competitors and implementation of best practices throughout the enterprise 6. Milestone payments 7. Focus on customer demand
Operational Level	<ol style="list-style-type: none"> 1. Daily production and distribution planning, including all nodes in the supply chain 2. Production scheduling for each manufacturing facility in the supply chain (minute by minute) 3. Demand planning and forecasting, coordinating the demand forecast of all customers and sharing the forecast with all suppliers 4. Sourcing planning, including current inventory and forecast demand, in collaboration with all suppliers 5. Inbound operations, including transportation from suppliers and receiving inventory 6. Production operations, including the consumption of materials and flow of finished goods 7. Outbound operations, including all fulfillment activities, warehousing and transportation to customers 8. Order promising, accounting for all constraints in the supply chain, including all suppliers, manufacturing facilities, distribution centers, and other customers 9. From production level to supply level accounting all transit damage cases & arrange to settlement at customer level by maintaining company loss through insurance company

From Fig 2: we conclude that SCM regards the interface and the allocation of decisions between two or more companies. This can be illustrated by different types of definitions of SCM (Hoekstra, Romme, 1993).

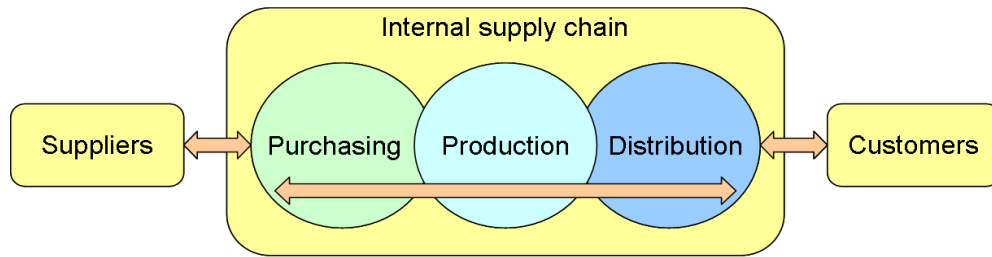


Fig-2: Internal Supply Chain

In today's environment, there is the added pressure to be more socially and environmentally responsible and there are risks which need to be mitigated and managed. Then, there is the complexity created by ever-increasing customer requirements and expectations, globalization, the pressure on cost, and the availability and access to resources. On top of this, management is expected to improve profitability, increase revenue growth, capture, and protect larger market share. In order to succeed, management must recognize that the ultimate success of an organization depends on the ability to integrate the company's network of business relationships in a mutually beneficial way.

The management of this network of relationships is supply chain management. Successful supply chain management requires cross-functional integration within the firm and across the network of firms that comprise the supply chain. It is focused the improvements in performance that result from better management of key relationships. By understanding the supply chain management processes and how they should be implemented, management will better understand the value of more integrated supply chains and how this integration will lead to increased shareholder value and a sustainable competitive advantage.

Demand & Supply Chain

In today's rapidly changing global supply chain market, with virtual enterprise model becoming very common, the need to run a demand-driven supply chain business has become very critical. Predicting the future demand accurately and responding to it in timely fashion leads to an optimized and profitable supply chain. Oracle Demantra's Demand Planning solution caters this basic need of organizations by providing them a platform to enhance their demand & supply chain process. Oracle Demantra product provides an web based collaborative platform to generate most accurate forecast using its unique Bayesian modeling technique. It has been seen that while most of the organization's today realize the importance and benefits of Demantra, in many cases the total cost of building an integrated Demantra environment is out of IT budget limits. Zensar's **Oracle Demantra Services** provides Demand driven business solutions, which optimize the forecasting process in the world's top companies, using best of breed technology for forecasting - Demantra.

Proactive Planning

1. Product Information	5. Sources of data
2. Customer Information	6. Collaboration needs
3. Details on Planning Cycle	7. Supply-Demand Picture
4. KPI's and other measures desired	8. Expectations from Demand Planning

Implementation for better understanding of the Business and its requirements

According to our opinion, the term Supply has a strong association with the idea that SCM regards the management of the relations with suppliers. From a customer point of view, we propose to start with demand management. For almost every chain that means, that chain conversion should be the leading theme.

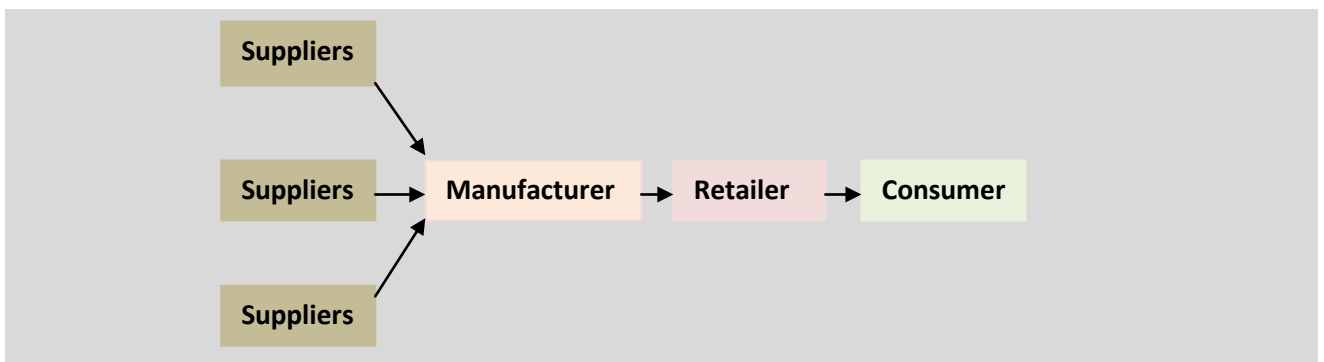


Fig-3: A Supply Chain

A classical supply chain is a strongly push-driven chain (In Fig 3) mostly based on production dominance. Related to a pure marketing vision the demand chain in figure 4 may be more realistic.

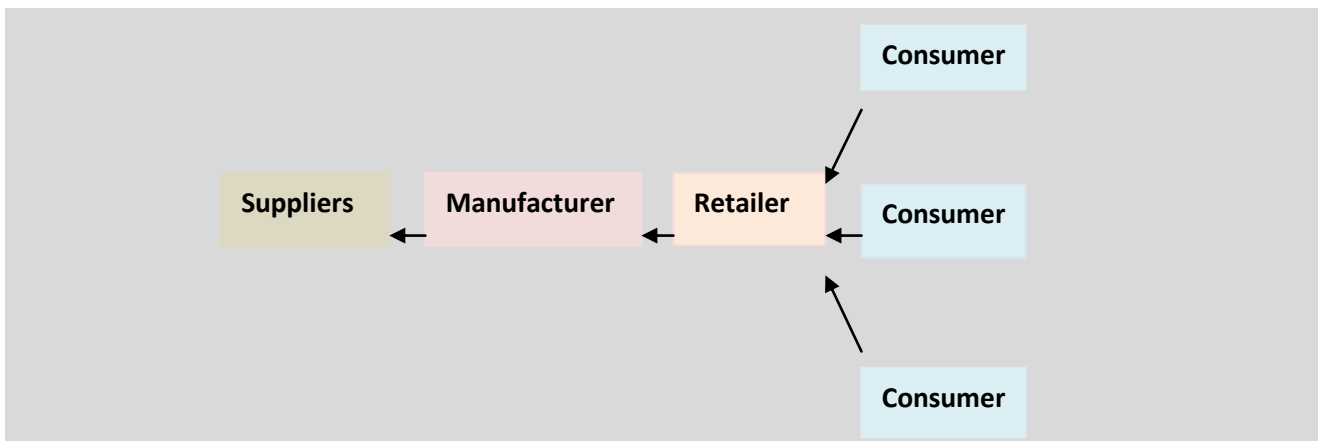


Fig-4: A Demand Chain

This complete pull-driven chain can be too extreme. Based on this meaning, a combination will be the best representation of reality.

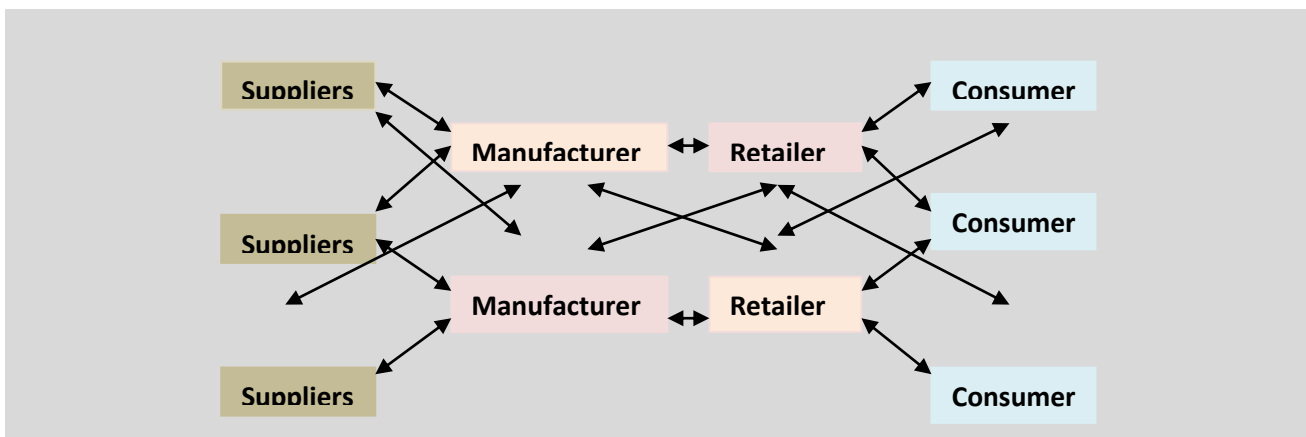


Fig-5: A Demand and Supply Network

Fig5 is represent the Demand and Supply Network and emphasis that this figure can be widened with logistics and ICT-service providers. Based on this idea the Center for Supply Chain Management has formulated the most embracing definition: “Demand and Supply Chain Management (DSCM) is the management of a network that links customers and suppliers as one ‘single entity’ with the objectives to create value and reduce waste through the voluntary integration and co-ordination of the objectives of three or more – and ideally, all the – independent parties in the network.”

In terms of Hoekstra, Romme (1993) a chain is a logistical infrastructure with three nodes and two interfaces. Gladly most of the companies have more than one customer and usually also more than one supplier. Based on this statement a network- infrastructure will be more realistic than a chain structure. Regardless this vision, the term network-integration has a relative long history in the information technology with slightly different meanings compared with logistics. For this reason, we persist to use the term chain integration, implicitly supposing that network integration is a better one.

The management of a supply chain as a ‘single entity’ agrees with the definition of Jones & Riley (1985). Especially in the basic figure of Efficient Consumer Response, Kurt Salmon Associates (1993) emphasize that it regards the destruction of the walls between the different trading partners. The decoupling of the different functions and partners by means of inventories has to be avoided. Porter (1985) introduced the term Value Chain. The creation of value has to be balanced with the efforts a company has to perform. Waste can be interpreted as the decrease in the spend thrift of raw materials, etc. but also in a broad sense as the reduction of costs in relation to revenues. By this we mean that a supply chain has to be efficient.

Companies can participate in more than one chain. The consort of companies can be defined as a possible path through a detailed network. Concentrate Demand driven Supply Chain Management on the integration of four functional areas within and between companies. From the demand side it regards the marketing aspects of DSCM, while purchasing is the entrance from the supply side. Logistics and ICT are the essential facilitating functions for DSCM. The four mentioned areas are according to our opinion the leading elements for the design, planning and implementation of a Demand and Supply chain (Ploos van Amstel, van Goor, 2002). Figure 6 is the representation of that vision.

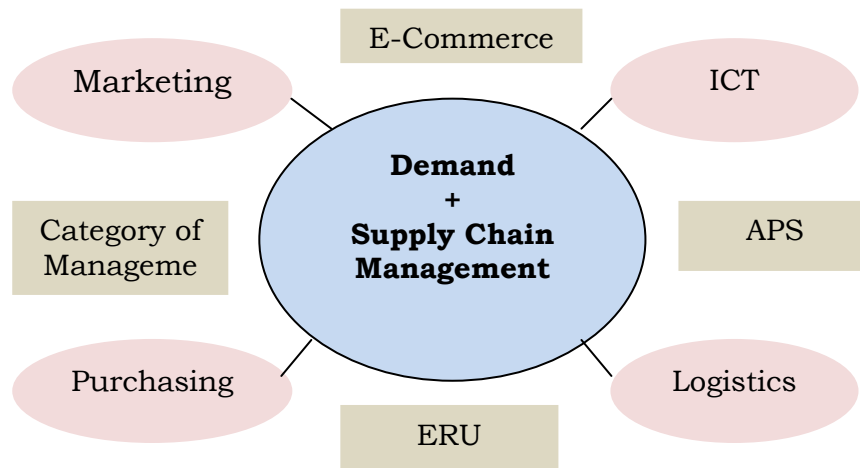


Fig-6: DSCM viewpoints and interfaces

Some possible interfaces

1. Category management is an important integration concept between marketing and purchasing.
2. E-commerce as part of E-business is a typical example of the rising interface between marketing and ICT.
3. Efficient Replenishment Upstream (ERU) is a co-operation between purchasing and logistics on a more intensive base than is the case until now.
4. The application of Advanced Planning Systems (APS) is a fundamental subject for the integration between logistics and ICT from a real supply chain software vision

Four Stages in SC Logistics

Customer service is a process that transcends organizational boundaries, even those of the company itself. The customer distribution process is more likely to involve thirdpartylogistics providers that perform certain activities in the supply chain: transport, storage, and reconditioning, testing and even assembly. That is why companies in thesupply chain strive to achieve strong co-operation in the supply chain, supply chainintegration or supply chain management. Supply chain management involves coordinating the logistical activities within theindividual links of the logistics chain in such a way that the logistical processes can bemanaged and can function as an integrated whole, with the support of an integratedinformation system. The ultimate goal is to optimize the logistics performance of thecomplete supply chain. Within the context of supply chain logistics, integration can occur at different levels:

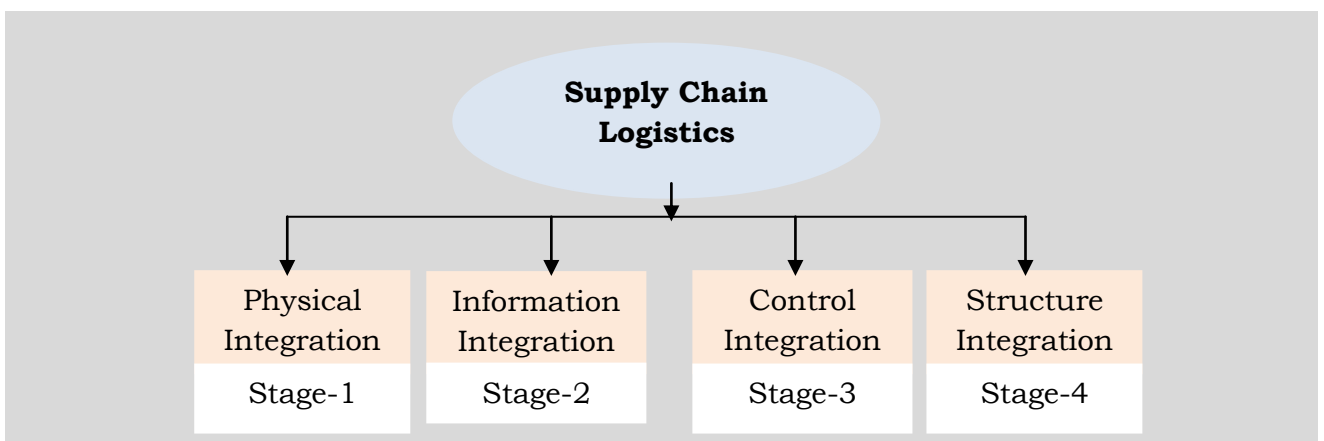


Fig-7: Four Stages in Supply Chain Logistics

<p>Physical Integration</p>	<ul style="list-style-type: none"> ▪ The performance improvement of the primary process ▪ Standardization of consumer and transportation packaging, pallets and roll-containers are examples of physical integration ▪ At the moment there is a strong tendency to replace corrugated board by multiple transportation systems ▪ The organization of a pool-system for this multi-trip packaging system seems to be a critical success factor
<p>Information Integration</p>	<ul style="list-style-type: none"> ▪ The information flow with respect to the primary process is tuned between vendors and suppliers. Electronic Data Interchange (EDI) is a tool, but not a target at this stage ▪ Breaking points in information flows can be prevented by using these tools ▪ The standardization of messages and barcodes are necessary but not sufficient conditions for information integration ▪ Chain partners must be prepared to share the information that is needed to manage the chain as a single entity ▪ Logisticians usually agree with this statement, marketers are rather restricted for competitive reasons ▪ SCM is not only a form of education between suppliers and vendors, but also a means for breaking down the barriers between functional specialism in each organization
<p>Control Integration</p>	<ul style="list-style-type: none"> ▪ The physical flow is simultaneously managed at more than one level in a logistics chain ▪ Time phased information facilitates the introduction of Distribution Resources Planning techniques ▪ Quick Response and Vendor Managed Inventory are proved concepts in the control-stage of SCM
<p>Structure integration</p>	<ul style="list-style-type: none"> ▪ Only performance increases in the primary process, the control system or the information system are the targets ▪ Structure-integration is a next step: Planning tasks and logistics responsibilities are delegated to another chain partner

The four stages of SCM are visualized in Fig7. There are many similarities between the elements of the logistics concept and the stages in supply chain integration. Finally, supply chain management helps to increase customer satisfaction, and hence to increase the profitability of all the partners in the supply chain. By giving careful consideration to integration, new concepts can be generated such as supplier backhauling, replenishment, product modifications, standardized packaging modules, consolidating competitors' product flows (synergy in goods flow), taking over manufacturers' inventory functions, cross-docking, coordinating customer service, third-party logistics providers, prepacking for end customers, coordinating production planning and information technology, etc.

Research in FMCG

Most of the well-known applications of SCM can be classified in one or more stages of integration. A preliminary conclusion is that the physical and information stages are operational on a large scale in U.S., European and Japanese companies.

The applications of control and structure integration are rather scarce. Therefore, we conclude that the value added through SCM can be attractive for all the traditional partners in a marketing channel. In the study, the success of supply chain logistics was defined as the way in which the logistical costs and/or the customer service level changed significantly due to cooperation in supply chains. A combination of cost reduction and service level was sampled in a report- mark. So the report-marks were the real independent variables to measure success.

The level of success in supply chain logistics

Internal variables	Distribution Logistics	Organizational aspects
1. Standardization of communication traffic	1. Utilization level of transportation	1. Management involvement
2. Exchange of detailed forecasts	2. Number of distribution centers	2. Joint targets in a chain
3. Order-status tracking and tracing	3. Frequency of replenishment day and night	3. Shared information-technology
4. Use of logistics control systems	4. Tuning distribution packaging and pallets	4. Trust and risks between channel partners
5. Type of order picking/cross docking	5. Standardization of materials handling equipment	5. Presence of channel captain/central co-ordination
6. Situation of Order Penetration Point		

Today's supply chains are still faced with the on-going challenge of trying to manage the long-lasting impact of the recent global market volatility. With the supply chain being the driving force in determining the value the company delivers to its customer base, efficiency, agility and flexibility are higher on the supply chain corporate agenda than ever before. Supply chains are becoming increasingly complex making accurate forecasting and demand planning a challenge but a prerequisite of successful supply chain management. However, many companies still struggle to achieve this leading to excess inventory, poor customer service and a spiraling cost base.

The FMCG sector seems to have finally joined India Inc's growth party by posting surprising double-digit growth in sales resisting the aftermaths of the downturn. The sector is likely to post a growth of 18 – 20 per cent in the second quarter of the current fiscal, according to The Associated Chambers of Commerce and Industry of India (ASSOCHAM). In the first quarter of current fiscal, the growth in FMCG sector was around 12%. The ASSOCHAM Financial Pulse Study titled “Prospects in the FMCG sector” stated that despite the negative impact of the scanty rainfall, demand from rural India is likely to remain robust complimented by a healthy rise from the urban areas going forward.

The Indian FMCG sector is the fourth largest sector in the economy with a total market size in excess of USD 14.7 billion. The FMCG market is set to double from USD 14.7 billion in 2008-09 to USD 30 billion in 2012. FMCG sector will witness more than 50 per cent growth in rural and semi-urban India by 2010. The FMCG industry primarily deals with the production, distribution and marketing of consumer-packaged goods, i.e. those categories of products that are consumed at regular intervals. Examples include food & beverage, personal care, pharmaceuticals, plastic goods, paper & stationery and household products etc. The industry is vast and offers a wide range of job opportunities in functions such as sales, supply chain, finance, marketing, operations, purchasing, human resources, product development and general management. Global leaders in the FMCG segment are Sara Lee, Nestlé, Reckitt Benckiser, Unilever, Procter & Gamble, Coca-Cola, Carlsberg, Kleenex, General Mills, Pepsi and Mars etc.

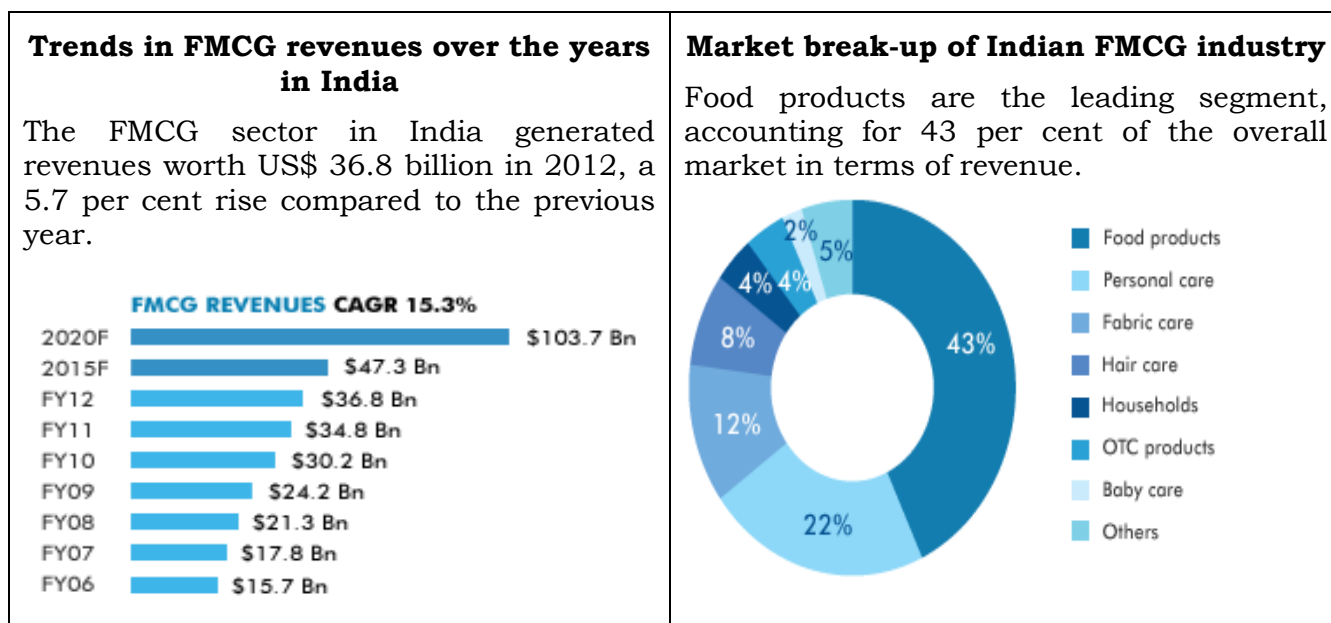
Performance

In India, the FMCG industry is the fourth largest sector with a total (organized) market size of over US\$15 billion in 2007, as per ASSOCHAM, and can be classified under the premium and popular segments. The premium segment (25%) caters mostly to the higher/upper middle-income consumers while the price sensitive popular or mass segment (75%) consists of consumers belonging mainly to the semi-urban or rural areas who are not, and cannot afford to be, brand conscious. The market growth over the past 5 years has been phenomenal, primarily due to consumers' growing disposable income, which is directly linked to an increased demand for FMCG goods and services. Indeed, it is widely acknowledged that the large young population in the rural and semi-urban regions is driving demand growth, with the continuous rise in their disposable income, life style, food habits etc.

At a time when the economy and other large industrial sectors such as automobiles, aviation and financial services are reeling from the global slowdown, the consumer goods sector in India has managed to defy the trend. According to the recent reports by Zeus Consulting, India's FMCG industry has so far been resilient to the slowdown in the economy and a dip in consumer sentiment, with most companies posting double-digit growth in net profits in the first half of fiscal 2009, backed by healthy sales. As very categorically said by the Amway India Enterprises managing director and chief executive, Mr. William Pinckney, "I am not saying that our company [sector] is recession-proof but it is recession-resilient." This statement on the whole stands strong for most the leading players in the FMCG sector. While a price hike and cost-cutting were the first lines of defense in a bid to protect margins, Indian manufacturers were able to let logic rather than bottom lines dictate measures, with increased marketing efforts, a well-thought product mix and new launches helping them emerge unscathed from the turmoil. The prospects going forward also remain promising.

Adi Godrej, Chairman and MD of Godrej Consumer Products Limited (GCPL) and Chairman of Godrej Industries feel that the best policy would be to provide tremendous fiscal and monetary stimuli to the economy. Once that is done, the economic growth will come through and that will generally create multiplier factors. FMCG already seems to be doing quite well and FMCG sector will have its best year ever in 2009-10," he said.

Fast moving consumer goods (FMCG) is the fourth largest sector in the Indian economy. The overall FMCG market is expected to increase at a compound annual growth rate (CAGR) of 14.7 per cent to touch US\$ 110.4 billion during 2012-2020, with the rural FMCG market anticipated to increase at a CAGR of 17.7 per cent to reach US\$ 100 billion during 2012-2025.



Fast moving consumer goods (FMCG) is the fourth largest sector in the Indian economy. The overall FMCG market is expected to increase at a compound annual growth rate (CAGR) of 14.7 per cent to touch US\$ 110.4 billion during 2012-2020, with the rural FMCG market anticipated to increase at a CAGR of 17.7 per cent to reach US\$ 100 billion during 2012-2025.

The FMCG sector has grown at an annual average of about 11 per cent over the last decade. Food products are the leading segment, accounting for 43 per cent of the overall market. Personal care (22 per cent) and fabric care (12 per cent) come next in terms of market share. Growing awareness, easier access, and changing lifestyles have been the key growth drivers for the sector.

The Government of India's policies and regulatory frameworks such as relaxation of license rules and approval of 51 per cent foreign direct investment (FDI) in multi-brand and 100 per cent in single-brand retail are some of the major growth drivers in this sector. The government has also amended the Sugarcane Control Order, 1966, and replaced the Statutory Minimum Price (SMP) of sugarcane with Fair and Remunerative Price (FRP) and the State Advised Price (SAP). There is a lot of scope for growth in the FMCG sector from rural markets with consumption expected to grow in these areas as penetration of brands increases. Also, with rising per capita income, which is projected to expand at a CAGR of 7.4 per cent over the period 2013-19, the FMCG sector is anticipated to witness some major growth.

Future Prospects

The only threats to this strong growth trajectory remain the high portion of unorganized trade, the limited distribution network of new entrants and the pressure on profit margins due to increasing competition. However, these are likely to be of diminished importance as proportion of organized trade increases and players invest in improving distribution. Going forward, the industry prospects remain attractive, and new graduates can hope to leverage the training and on-the-job learning at the leading players in various functional roles, across the Metros as well as the interior heartlands on India.

The FMCG Industry is on a high growth trajectory with the overall demand expected to raise manifolds over the next decade. This high growth is most likely to be accompanied by significant structural shifts such as changing customer preferences, emergence of modern retail formats, and growing rural spend propensity.

Fast moving consumer goods will become a Rs 400,000-crore industry by 2020. A Booz & Company study finds out the trends that will shape its future.

The anti-ageing skincare category grew five times between 2007 and 2008. It is today the fastest-growing segment in the skincare market. Olay, Procter & Gamble's premium anti-ageing skincare brand, captured 20 per cent of the market within a year of its launch in 2007 and today dominates it with 37 per cent share. Who could have thought of ready acceptance for anti-ageing creams and lotions some ten years ago? For that matter, who could have thought Indian consumers would take oral hygiene so seriously? Mouth rinsing seems to be picking up as a habit — mouthwash penetration is growing at 35 per cent a year. More so, who could have thought rural consumers would fall for shampoos? Rural penetration of shampoos increased to 46 per cent last year, way up from 16 per cent in 2001.

Consumption patterns have evolved rapidly in the last five to ten years. The consumer is trading up to experience the new or what he hasn't. He's looking for products with better functionality, quality, value, and so on. What he 'needs' is fast getting replaced with what he 'wants'. A new report by Booz & Company for the Confederation of Indian Industry (CII), called FMCG Roadmap to 2020: The Game Changers, spells out the key growth drivers for the Indian fast moving consumer goods (FMCG) industry in the past ten years and identifies the big trends and factors that will impact its future.

The FMCG industry will grow at least 12 per cent annually to become Rs 400,000 crore in size by 2020. Additionally, if some of the factors play out favourably, say, GDP grows a little faster, the government removes bottlenecks such as the goods and services tax (GST), infrastructure investments pick up, there is more efficient spending on government subsidy and so on, growth can be significantly higher. It could be as high as 17 per cent, leading to an overall industry size of Rs 620,000 crore by 2020.

Says Booz & Company Partner Abhishek Malhotra: "The Indian GDP per capita is low but many Indian consumer segments which constitute rather large absolute numbers are either close to or have already reached the tipping point of rapid growth. The sector is poised for rapid growth over the next 10 years, and by 2020, the industry is expected to be larger, more responsible and more tuned to its customers."

Based on research on industry evolutions in other markets and discussions with industry experts and practitioners, Booz & Company has identified some important trends that will change the face of the industry over the next ten years. Companies are now realizing that current supply chain configurations need to evolve to enable them participate in cashing in on the growth. This requires fresh thinking on the ways in which an organization would structure itself in terms of its key supply chain processes and drivers.

Findings and Conclusions

In general, partnership through SCM has the abilities to improve customer service, to increase flexibility, to shorten lead-times and to reduce logistics costs. To be more specific, our research shows a number of threats for chain partners and service providers.

Confidence:

To realize a maximum value added through partnership/SCM a 100 percent confidence should be enjoyed between chain partners. Openness with respect to performance indicators and costs is a minimum condition to be successful in any kind of partnership. Although account-management and relation-marketing suppose the same prerequisites, in practice the real win-win-relations in commerce and logistics are rather scarce. This point dramatically obstructs the rise of partnerships.

Internal performances: A thorough knowledge of the internal operation of a chain partner is a necessary condition for external co-operation. Each company should use its hierarchy-of-performance indicators (De Leeuw, s. 1999). There should be no discussion about the used attributes and parameters. Possibilities for external partnerships are frequently seized to distract the awareness for internal problems. The lack of these fundamentals seems to be an important reason for failures in partnerships.

Logistics Knowledge: In a number of industries contract logistics is presented as the solution for non-core-business-activities of a manufacturer or distributor. Although it has proved to be a successful strategy in different industries, a lot of shippers misunderstand their positions. Shippers believe that they no longer have to invest in logistics knowledge. They believe that the service provider will deliver physical and knowledge services. We wish to emphasize that especially in cases of outsourcing; the logistics knowledge of a shipper should be more accurate than ever.

Flexibility in Production: Last but not least, the most threatening aspect for logistics service providers has to be mentioned. The last two stages of SCM (control and structure integration) suppose a very familiar relation between vendors and suppliers or distributors and manufacturers. Based on perfect market information a manufacturer can produce in an optimal way. This may lead him to invest in maximum flexibility in his machines. Queuing-times and recondition-times are reduced to minor sizes and the production lead-time becomes as short as possible. In that situation the order-penetration-point: make to order replaces the policy of make to stock. There no longer is a disconnection between sales and production. Inventories of finished products become a characteristic of past situations. Efficient Consumer Response can be realized directly from the production-lines. Warehouses for finished products are only needed in cases of seasonal or promotional products. For all other products (central or regional) depots will only be used as grouping or transit centers. As in past times, the service provider will only function as a trucking firm believes that this scenario can be rather dangerous for the existence of logistics service providers.

Conclusion

We believe that Demand driven Supply Chain Management is an amazing challenge for companies to satisfy their customers in a better way. In this paper we discussed the logistical view on DSCM. A four-stage integration model seems to be realistic for the FMCG-industry. What's happening in FMCG will happen within five years in other types of industry. So we think that the developed logistics model is applicable on an industry wide scale. The dilution of goods flows is one of the biggest problems in DSCM. This problem reaches its top in the area of E- fulfillment. For that reason we formulate the statement, that also E-logistics can learn a lot of the experiences within DSCM. So we conclude that DSCM is really a broad logistical challenge.

References:

1. Dekker, H.C. and A.R. van Goor (2000), Supply Chain Management and Management accounting: A case study of Activity Based Costing. *International Journal of Logistics: Research & Applications*, volume 3, pp.41-52
2. Eert, A. van, J. van Riet and A.R. van Goor (2000), Supply chain directions in the food industry, *Journal for Purchasing & Logistics (Dutch)*, Vol.16, nr.12, December pp.8-13
3. Gattorna, J.D. (1998), *Strategic Supply Chain Alignment*, Aldershot, U.K., Gower Press.
4. Handfield, R.B. and E.L. Nichols (1999), *Introduction to Supply Chain Management*, New York, Prentice Hall Inc.
5. Hoekstra, T. and J.H.J.M. Romme (1993), *Integral logistics structures*, McGraw Hill, Maidenhead U.K.

6. Jones, T. and D.W. Riley (1985), Using Inventory for Competitive Advantage through Supply Chain Management, The International Journal of Physical Distribution and Materials Management, Vol.15, pp.16-26.
7. Koning, M.H. (1998), a logistics vision on SCM, Unpublished paper, Amsterdam Free University.
8. Kurt Salmon Associates (1993), Efficient Consumer Response, Washington D.C, Food Management Institute.
9. Lee, H.L. and C. Billington (1992), Managing Supply Chain Inventory: Pitfalls and Opportunities, Sloan Management Review, pp. 65-73
10. Leeuw, S. de, M.J. Ploos van Amstel and A.R. van Goor (1999), The Selection of Distribution Control Techniques, The International Journal of Logistics Management, volume 10, pp. 97-112.
11. Porter, M.E. (1985), Competitive advantage, New York, Free Press.
12. Ploos van Amstel, M.J. and W., A.R. van Goor (forthcoming 2002). European Distribution and Supply Chain Logistics, Pearson, U.K.
13. Waller, M.E., E. Kohnson and T. Davis (1999), Vendor Managed Inventory in the Retail Supply Chain, Journal of Business Logistics, Vol. 20, pp. 101-120.