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Study on Supply Chain Management of Industries in FMCG Sector in Bangladesh

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Abstract- Now a days, supply chain management plays an important role in business industry. Supply chain management involves optimizing industrial operations to increase both speed and efficiency. Both speed and efficiency are vital to increase service quality and ensure product delivery at earliest time. Efficiency also increase the power of industry to handle their partners in a structured manner. The FMCG Industry is on a high growth in our country. Proper supply chain management practice is important for FMCG industries of our country because customers will choose the company that meets their needs fastest. It is also important to get competitive advantages in global market. Industries of our country increasingly find that they must rely on effective supply chains, or networks, to compete in the global .Industries are now realizing that customer driven supply chain configuration helps them to participate in achieving growth. This requires appropriate thinking on the ways in which an industry would structure itself in terms of its key supply chain tools. Supply chain management is also important for industrial success. Industries with geographically more extensive supply chains connecting diverse trading groups tend to become more effective, innovative, and productive and customer focused.

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I. INTRODUCTION

Fast Moving Consumer Goods (FMCG) goods are commonly named as consumer packaged goods. Items in this category include all consumables (other than groceries/pulses) people buy at regular periods. The most common in the list are toilet soaps, detergents, shampoos, toothpaste, shaving products, shoe polish, packaged foodstuff, and household accessories and extends to certain electronic goods. These items are meant for daily of frequent consumption and have a high return.

The FMCG Industry is on a high growth curve with the overall demand expected to multiply over the next decade. This high growth is most likely to be

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accompanied by significant structural shifts such as changing customer preferences, emergence of modern retail dimensions, growing rural spend tendency.

II. SUPPLY CHAIN MANAGEMENT

Supply chain management, then, is the active management of supply chain activities to maximize customer value and achieve a sustainable competitive advantage. It represents a conscious effort by the supply chain firms to develop and run supply chains in the most effective & efficient ways possible. Supply chain activities cover everything from product development, sourcing, production, and logistics, as well as the information systems needed to coordinate these activities. A customer-focused definition is given by Hines (2004:p76): "Supply chain strategies require a total systems view of the links in the chain that work together efficiently to create customer satisfaction at the end point of delivery to the consumer. As a consequence, costs must be lowered throughout the chain by driving out unnecessary expenses, movements, and handling. The main focus is turned to efficiency and added value, or the end-user's perception of value. Efficiency must be increased, and bottlenecks removed. The measurement of performance focuses on total system efficiency and the equitable monetary reward distribution to those within the supply chain. The supply chain system must be responsive to customer requirements."



Fig. 1: Basic Supply Chain Management Diagram

III. VALUE-CHAIN CONCEPT

The value chain framework quickly made its way to the forefront of management thought as a powerful analysis tool for strategic planning. The value-chain concept has been extended beyond individual firms. It can apply to whole supply chains and distribution networks. The delivery of a mix of products and services to the end customer will mobilize different economic factors, each managing its own value chain. The

industry wide synchronized interactions of those local value chains create an extended value chain, sometimes global in extent. Value chain analysis has also been successfully used in large organizations to show how work selection, work planning, work scheduling and final work execution.

IV. SWOT ANALYSIS

a) Strength

Most of the FMCG companies of Bangladesh are producing fresh drinking water, Atta, Maida, Suji, Soyabean Oil and so on. ISO 9001:2000, certificate earned by many industries for their facilities for quality product and management. Some company achieved Quality Summit Award for outstanding performance in quality commitment and industrialization.

b) Weakness

There are some limitations to run operations of industries in Bangladesh. Most of the employee and worker of factories are not used to with ERP system. So in this case to collect information sometimes need to use manual system, which causes information gap. In FMCG sector should use pull marketing strategy, but in many industries are mostly dependent on push strategy.

c) Threats

Inflation and political instability causes so many problems, like inflation raise the price of raw materials

and instable political situation causes hamper in delivery process, planning process etc.

d) Opportunities

There is a huge opportunity for many Industries. Some company has huge capital and resources to become multinational company. But in this case it is necessary to change their position gradually and need to proper utilization of their resources.

V. PUSH PULL CONCEPT

Push based supply chain strategy, usually suggested for products with small demand uncertainty, as the forecast will provide a good direction on what to produce and keep in inventory, and also for products with high importance of economies of scale in reducing costs. Moreover, Pull based supply chain strategy, usually suggested for products with high demand uncertainty and with low importance of economies of scales, which means, aggregation does not reduce cost, and hence, the firm would be willing to manage the supply chain based on realized demand. Again, Hybrid Push-Pull strategy, usually suggested for products which uncertainty in demand is high, while economies of scale are important in reducing production and/or delivery costs

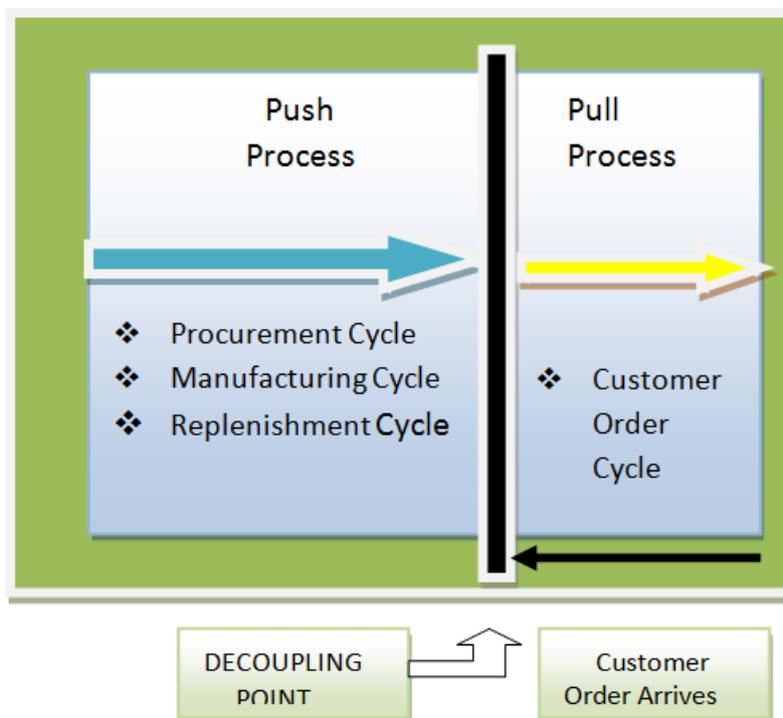


Fig. 2: Push pulls Strategy of supply chain management

VI. IMPORTANCE OF SUPPLY CHAIN MANAGEMENT IN INDUSTRIES OF BANGLADESH

To overcome new challenges that need to be addressed for an efficient and effective supply chain are

1. Managing generation of different varieties
2. Aligning to the out start of new channels
3. Competitive pressures
4. The need to improve operations
5. Increasing levels of outsourcing
6. Managing the challenges of reach and so on

Agility in supply chain: Agility practices enable the supply chain to change how processes operate.

Agility allows supply chain partners to work together to produce the amount of product that is needed daily, not based on quarterly, monthly, or yearly forecasts. Essentially, agile solutions are a means of taking the lean supply chain and improving it to respond and foster supplier-to-customer-to-manufacturer relationships. Supply chain entities who have implemented agile supply chain solutions understand that real-time data means the sudden change in demand could occur without warning, which could undermine the relationship between suppliers. Therefore, these entities have sought to find ways to still arrive at the same finished product, but at a customized result for each order.

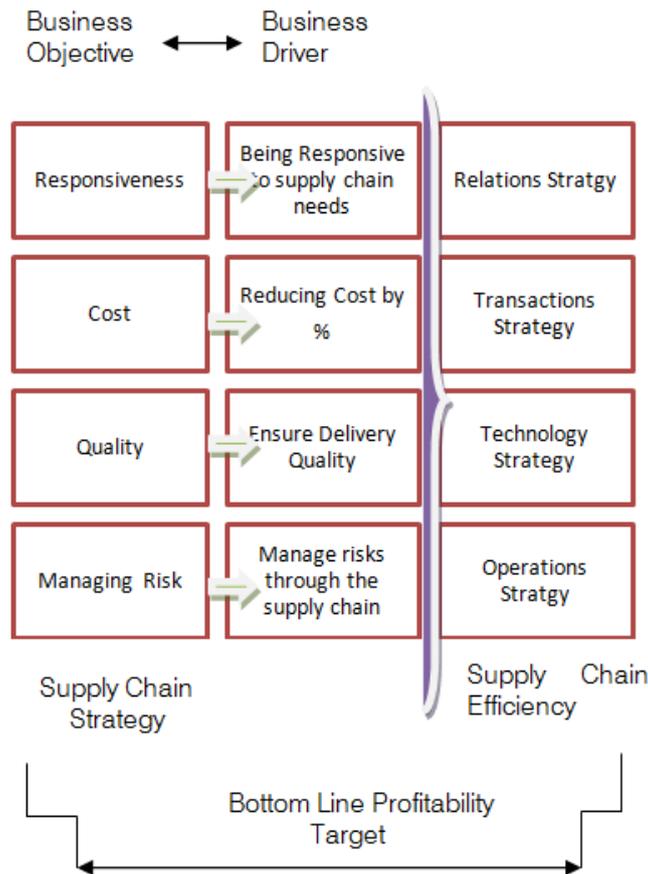


Figure 3: Agile supply chain strategy

VII. LEAN CONCEPT

The concept of Lean which is essentially a team-based approach to continuous improvement focused on eliminating non-value added activities or “waste” from the viewpoint of the customer, has been around in one form or another for many years, at least in manufacturing. It is only recently that it has been applied to the supply chain & logistics management area.

Importance of transportation system: A transportation management system is a subset of

supply chain management concerning transportation operations and may be part of an enterprise resource planning system. A TMS usually sits between an ERP or legacy order processing and warehouse/distribution module. Transportation system plays a vital role to get competitive advantages. Proper transportation system save time and money and ensure quick delivery of the product to the customer. Transportation management systems manage key processes of transportation management such as

Planning and optimizing of transport rounds
 Inbound and outbound transportation mode and transportation provider selection
 Management of motor carrier, rail, air and maritime transport
 Real time transportation tracking
 Service quality control in the form of KPIs
 Vehicle Load and Route optimization
 Transport costs and scheme simulation
 Shipment batching of orders
 Cost control and so on.

VIII. KEY SUPPLY CHAIN ACTIVITIES OF SCM DEPARTMENT OF SOME INDUSTRIES

a) *Procurement*

Raw materials and packaging materials inventory purpose continuously coordinate with local and foreign trade department. According to product requirements based on market demand, analysis is made to find out proper quantity within the right time of raw materials and packaging materials. This is approved by the top management.

b) *Inventory*

Accomplished real time visibility into demand, supply, costs and fulfillment measures and trends. Create an inventory costs, turn rates and inventory profitability

c) *Production*

It is an important part which is done by based o forecast production plan provides by the factory and meet demand from the regular stock.

d) *Planning*

Strategy for managing all resources that goes toward meeting customer demand for their product & services. Ensure resources utilization to achieve exact efficiency through inventory and production planning. Distribution planning is necessary to improve utilization levels of transportation. Optimization is essential to collaboration with suppliers, customers and partners.

e) *Order Processing & Distribution*

Co-ordinate with receipt order from customer, take immediate steps for approval & make DO for fast delivery. Proper transport system is essential to distribute. For abnormal situation, use rail and cargo trailer to ensure smooth delivery process. Transport optimization analysis done by analyzing of data.

f) *Depot Management*

Small amount sales order taken from depot and distributed from there to minimize the transport cost and leading time.

IX. IMPORTANCE OF KPI

Using KPIs for performance measurement ensures that industries are always evaluating business activity against a static benchmark. This shows that fluctuations are immediately visible and if performance moves in the wrong direction, action can quickly be taken to address the situation. When a KPI shows that performance is consistently meeting or exceeding the required level, industries can decide to raise the bar and set a higher standard to aspire to. For this reason, KPIs are essential for any business improvement strategy.

a) *Competitive Advantages*

Greater and more intense competition and global value chains are leading to substantial shifts in what is expected of the supply chain function. It is no longer enough to simply connect supply and demand at optimal cost and service levels. Today's business industries are demanding more from their supply chains, including competitive advantage. Operations and Supply Chain both play important parts in any organization. Focuses on how Firms can use Operations Management and Supply Chain Management to gain competitive advantage. The ways in which competitive advantage in operations management can be achieved are explained with special focus on game-changing trends in operations and supply chain management Integrated Strategies supply chain experience comprises a powerful combination of industry research and consulting support. Our track record includes advancing methodologies and business contributions in the following areas: Sourcing/Purchasing, Commodity/Supply Base Management, Logistics, Materials Management and Planning, Distribution, Inventory Management, Warehousing, Customer Focus and Distinction, and Transportation.

b) *KPI Analysis of SCM*

If we consider a product, such as tea; then an industry will try to achieve next following objectives to improve their business in every month or every year. For this purpose, an industry can consider these areas such as to increase inventory turnover, perfect order rate, inventory to sales ratio, rate of returns and so on.

Process to achieve exact order rate with error reducing-

Formula= (Cancel D.O)/ (Total Customer Order)

Indicator	July 2016	August 2016
Quantity	(Value is assumed) 460/123455 = .0032	390/132455 = .00294
Value	108100/31859965 = .0033	245873/86422391 = .0029

Maintain proper rate of return-

Indicator	July 2016	August 2016
Quantity	(Value is assumed) 3/22391 = .00013	(Value is assumed) 5/21211 = .00023

To increase turnover-

Formula= Sales/ ((Opening stock+Closing stock)/2)

Indicator	July 2016	August 2016
Quantity	(Value is assumed) 45887/((2235+5663)/2) = 11.61	(Value is assumed) 39588/(3321+5773)/2 = 8.7
Value	2274521/(54772+68892)/2 = 36.78	2044931/(68342+67744)/2 = 30.05

Stable inventory to sales ratio-

Formula= (Total inventory value)/ (Total sales value)

Indicator	July 2016	August 2016
Value	(Value is assumed) 1543219/4577821 = .33	(Value is assumed) 1444733/3887331 = .37

X. CONCLUSION

Supply chain management of industries in Bangladesh is getting strong day by day to achieve business objectives. However, some necessary actions are essential to get the exact benefit of supply chain management for our industries. Supply chain management in these Industries of Bangladesh should be approached in a more systematic manner based on integrated and documented processes. The various supply chain components like suppliers, manufacturers, warehouses and stores should be integrated in a single system, which makes supply chain management more effective. The team involved in the operational side on handling the supply chain should be highly trained in supply chain management function. The visibility needs to be improved if supply cannot be directly controlled. The collaboration with local partners, across the industry and with universities is crucial to successfully managing social responsibility in supply chains. This sector should keep in a situation of political stability and a congenial business environment. Political turmoil and the disturbance are bad for this kind of industries. So, Proper steps should be taken by the government to keep this sector free from any kinds of disturbance. It is also necessary to improve the overall customer relationship and organizational environment though it is providing good organization environment.

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