

## **Role of Information Technology In Supply Chain Management**

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### **Abstract**

Information technology and its uses in organization are very popular in every country. In this paper we study about use of IT with the supply chain management. It also covers the contribution of Information Technology (IT) in helping in entire supply chain management system to achieve higher service level and lower stock level and lower supply chain cost. IT is a useful for organization and integration within the stakeholders of the supply chain. Mainly IT will reduce the operational expenses of supply chain management. This will help for making a good decision support regarding the transaction processing and planning. One of the components of the implementation of supply chain management is information sharing through two way communication between partners within a supply chain. As a result, most of the corporate enterprises are, considerably, investing in the development of an appropriate IT infrastructure for supply chain integration in terms of computer hardware, software and connectivity means of electronic Data Interchange (EDI), Bar Code System (BCS), Enterprise Resource Planning (ERP), and Intranet, Extranet and Internet.

**Keywords:** Information Technology (IT), Supply Chain Management (SCM), Development, Infrastructure, Enterprise.

### **Introduction**

In globalization companies to be innovative and agile to meet customer demands. According to the capabilities of organization may lead to qualify in efficiency and flexibility. Supply chain management play a crucial role to increase the efforts of marketing team. The main problem of supply chain is to determine how to successfully accomplish this integration. Business management has entered the latest generation so that we will simply advice for companies to use the information properly with the help of supply chain management. In the latest era in cut throat competition the success of single business will depend on management's ability so that company will take full benefits of their information. In commerce, SCM, the flow of goods and services and also involves the movement of raw material from point to point consumption. Supply-chain management has been defined the supply chain encompasses all of those activities which has been starting from moving goods from starting point to the end user. Mainly this is done by keeping tighter control of internal stock, internal distribution, sales and stock of company vendors. Information technology has been very useful for every company so that supply chain management will also take the help of IT which giving the brief information of everything used in the company. IT makes the supply chain visible for a management which is useful for improving the performance of company. The most important role of IT is to reduce the process of transactions between supply chain partners through cost effective data.

## **Objectives**

- To understand about the role of information technology in supply chain management.
- To understand about the procedure of information technology.
- To know the benefits of IT in supply chain management.

## **Review Of literature**

Mishra Kumar Rohit(September 25, 2006) said that world is shrinking day by day with advancement of technology. Customers' expectations are also increasing and companies are prone to more and more uncertain environment. Companies will find that their conventional supply chain integration will have to be expanded beyond their peripheries. The strategic and technological innovations in supply chain will impact on how organizations buy and sell in the future.

In July 2008 article of research gate said that the use of IT for SCM purposes was studied by dividing the use of IT into three categories, 1) transaction processing, 2) supply chain planning and collaboration, and 3) order tracking and delivery coordination. Further, the drivers behind these different IT use types were examined. Based on the empirical data collected for this study, the three IT use categories proposed represent well the roles that IT plays in SCM. In addition to clarifying this widely discussed topic, the categorization provides a basis for further research on the use of IT in SCM.

## **Research Methodology**

The research paper is mainly based upon the secondary data. Data is collected from related journals, books & newspapers. Mainly data will analyze to know about the changing behavior of consumer in society.

## **Role of IT In Supply Chain Management**

In today's modern era IT will play an important role in every sector mainly in supply chain management. IT will uses in many different sectors like transaction execution, collaboration and coordination and decision support. With the help of IT companies can create better visibility performance of supply chain, which will gives us to more control over business and also stay ahead of the competition than other companies. IT will help to enable your business to operate more efficiently, help to reduce many different operational expenses. Additionally, through a more stable and efficient supply chain, you can greatly enhance customer satisfaction and retention. Here are just a few ways to integrate modern technologies into your business model and improve your supply chain management.

## **Shipping And Tracking**

With the help of latest technologies and internet based software companies can create simple supply process and decreasing the shipping problems. Software like flash view giving us option to relating all aspects of their supply chain in one place. The software will allow us to digitalize our all data like inventory, tracking option, electronic invoices etc. With the help of IT in supply chain management we can easily reduce the time spent shipping, receiving, tracking and

compiling order data, which will easily save the company's time and money. Flash views will easily giving the good experience to the customer with the ability to track their order status. If we talking about these days having technology like flash view is helpful for the company as well as consumer also.

### **Use Of Social Media**

A social networking site is a famous tool for every enterprise to increase their company's share in the market. Over 288 million Twitter users and 1.23 billion Facebook users, it is a huge amount in which company gain visibility will improved quickly. Over 70 percent of all 400 companies depend upon the social media for their products marketing. According to social media companies will prepare their marketing strategy and supply chain management. With the help of social media company's can easily communicate with the customers, increase the visibility of your company, know about the demand of the customers, prepare cost effective products, reduce other expenses so that company will easily enhance their overall productivity. With the help of social media companies will easily interact with the customers, know their feedback, give their delivery schedule about their products different updates also.

### **Simplify Your Supply Chain**

With the help of IT company will easily simplify their supply chain because through technology they will easily collect the data like delivery schedule, weather forecasting so that the company will not face any type of loss from customers. Mainly companies will take the help of IT to select their delivery area so that the customer does not face any difficulty to collect their order. They will easily collect their order time or before time. If we talking about companies production the company will always select that area which will consumed less time to provide raw material so that company will easily manage their supply chain at the time of production as well as delivered finished goods.

### **Limitations**

**Traceability:** recent events like food safety with India's fast food suppliers like KFC, Dominos, Pizza hut suppliers has does not have proper equipment to trace the order by customers. Similar to supply chain visibility, global and complex supply chains make it very difficult to quickly and efficiently trace materials back through the supply chain.

**Complexity:** When any company will going for reduce the cost supply chains can become very complex, creating an intricate web of global third parties when company will attempting to track and control supply chain in that case the complexity is very challenging, creating many other problems also.

**Supplier Performance:** Suppliers are freeze on costs and tight delivery times so that they does not reduce the cost of raw materials which was not good for companies. In that case company does not fulfill the demand according to the demand. Sometime supplier performance will also affects the supply chain management.

**Natural Disasters (e.g. extreme weather, earthquakes, floods):** There is also a little bit confusion about the weather patterns and weather events because of global warming. Natural disasters like typhoons, floods, earthquakes, volcanoes had creating a negative impact on location as well as duration also. It will create a problem for the company as well as customers also.

**Technology:** In the modern era technology will easily improve the supply chain performance but daily updated technology will create a more expenses on technology. This was harmful for the company. If technology will not properly worked, cannot be managed properly then it can be the biggest problem for the company because everyone does not have proper knowledge updated technology.

**Cyber Risks / IT Issues:** We will talk about the IT in supply chain management. But cyber risks will also a big issue for every company. Supply chains are depending upon the flow of information up and down the value chain, and integrity of that information. Cyber attacks are a constant threat and can result in loss of commercial information, exposure to stolen confidential information and an inability to conduct business for some period of time.

## Conclusion

Supply chain management and information technology are incomplete without one another. Today's modern era company has not forgotten the benefits of technology so that it is company's duty to enabled supply chain to prosper & become an aid to the SCM manager. . A distinction can be generated between the volume of information and the richness of information exchange. It is sure that the importance of IT and necessary information will be playing an important role for the company. The company will take care about the information from cyber risks/IT risks so that anyone does not misuse that information. Company will not fully depend upon the IT because if the IT tools will misbehave it will be harmful for the company. Mainly with the help of hacker tools many hackers will easily steal the data or change the data. In the business world quality of data will play a vital role so that it is company's duty to protect the IT tools by different software's. If the qualities of data will proper then supply chain will automatically in proper work.

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