

International Journal of Advanced Research in Computer and Communication Engineering

Vol. 10, Issue 7, July 2021

DOI 10.17148/IJARCCE.2021.10792

Application Of E- Commerce to Supply Chain Management

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Abstract: The rise of e-commerce in each B2C and B2B sectors have provided a superfluity of opportunities for businesses to expand their reach, generate omnichannel revenue, and target new customers. It does, however, bring tremendous competition, as new firms, giant and tiny, frequently enter the market and contend for a bit of the action. The Indian retail trade has become one in all the foremost dynamic and fast industries as results of the entry of the many new enterprises. Total consumption expenditure is predicted to succeed in virtually US\$ three, 600 billion by 2020, up from US\$ one, 824 billion in 2017. In fact, the retail sector accounts for quite simple fraction of the country's gross domestic product and employs over 8 May 1945 of the force. India is that the worlds fifth-largest retail destination. India is placed 73rd within the 2019 Business-to-Consumer (B2C) E-commerce Index discharged by the United Nations Conference on Trade and Development. In keeping with the planet Bank's Doing Business 2020 report, India is that the world's fifth-largest retail destination, stratified 63rd. In terms of retail, India is that the world's fifth largest destination. India is placed sixteenth within the FDI Confidence Index (after the USA, Canada, Germany, UK, China, Japan, France, Australia, European nation, and Italy). (Indian complete Equity Foundation)

Businesses should make sure that their offer chain management activities square measure well joined so as to flourish in ecommerce. The Supply chain must be equivalently capable of supply ecommerce sales channels because it is in offline marketplaces. This paper tries to answer the subsequent queries by relating the prevailing literature why offer chain is thus necessary to e-commerce success, what square measure the vital areas to be targeted whereas adopting offer chain management and {to provide tooffer to produce} appropriate suggestions so as to boost supply chain potency.

Key Words:

Logistics, supply chain management, e-commerce, e-supply chain management, Internet, competitive advantage, information systems and technologies.

INTRODUCTION:

Advances in digital technology are having a huge impact on the world around us and leading to a big change in the customer behavior today. Connected client behavior digitally responding to social media trends and participating in online oral communication across a huge interconnected international community. but several offer chains cannot maintain that's as a result of their structured during a very ancient ordered means as an example let's think about a state of affairs wherever a celeb post an image on instagram making excitement and generating an explicit demand on to the merchandise across globally, in a very given state of affairs a typical company with a standard offer chain management would react to an explicit peak in demand in a very means which can find yourself acquisition vast price thanks to its faulty procurance procedure and lack of flexibility within the operational procedure, the bag makers typically forecasts the demand supported the rear look of previous year bills therefore once sales report shows that the merchandise was sold out expectedly they awaken and move into firefighting mode. Then later the corporate can regulate their forecast to replicate the new level of demand so notice that they do not have enough material nor production capability to form replacement. In order for their decision upon their provider however they too do not have the specified material out there, the bag manufacturer asks them to order new materials and expedite cargo that ends up in further price. Finally once the fabric arrived and product created they then need to be transport it to the stores that wasn't planned earlier which suggests premium shipping price should be borne, all and everyone it takes for the corporate around four months to make full their product however sadly by then the client can lose their patience and within the in the meantime they switch for similar product from the rival manufacturer within the finish with unplanned further price and also the unsold product a bag manufacturer created a loss out of the total expertise. This, however, doesn't need to be the case. the standard offer chain should involve a connected, sensible and extremely economical offer chain scheme with layers to deal with client care answer scheme and digital operation scheme, corporations United Nations agency are able to setup Associate in Nursing run client care answer and digital operation ecosystems empower themselves proactively



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managed and with efficiency fulfill client want across multiple channels quickly distinguishing changes in demand and organizing their offer chain consequently during this means they'll flip the availability chain into real competitive advantage and use it as an enabler of a brand new digital business models.

Lets perceive however a corporation with a digital offer chain responds to the similar peak demand state of affairs. The company's proactive sensing capability together with social media trailing identifies the height in demand early, the assembly is adjusted mechanically by victimizing the direct link between demand and producing. At an equivalent time Associate in Nursing updated demand arrange is shared with all relevant suppliers United Nations agency straightaway raised their new demand in material coming up with and regulate then with producing priority consequently meantime client track the order method keeping up-to-date once its been factory-made and once it might be delivered and throughout the method {the offer theavailability the provision} chain transparency answer monitors relevant supply chain knowledge from the range of internal external structured and unstructured sources enabling proactive risk management. For the walk delivery to the client the corporate leverages its established flexibilities of network with shared network infrastructure ensuring that the businesses that leverages its digital offer chain operates at skillful elegance that's required within the digital age which suggests happy customers and flowing profits. offer chains are extraordinarily advanced and no company has succeeded in building its really digital nevertheless.

Because of its operative vogue, standard offer chain management was driven by suppliers, however current or e-supply chain management is driven by consumers. As a result, there's Associate in Nursing ineluctable transparency in chain management, with the customer initiating and final operational activity. the ultimate stage of the method is additional vital as a result of it contains consumer reviews, suggestions, and feedback, all of which may have a bearing on the organization.

LITERATURE REVIEW:

Supply chain management (SCM) refers to strategies for optimizing the flow of materials or services to make a product or service available to the end user from conception to completion. Its goal is to complete this activity in a cost-effective and integrated manner. (Reis et al, 2014).

Today, supply chain is a part of every major sector. Demand planning, sourcing, production, inventory management or storage, and logistics are the major elements that underpin basic supply chain management in any sector. The widespread expansion of e-commerce is the result of customers' increased use of the internet. By creating their own personal accounts on the internet, these customers get access to the supply and delivery process. (Yang, 2012).

As a result, the new e-commerce path map encompasses more than just creating a website and selling things online. Rather, it involves product configuration readiness, appropriate infrastructure, logistics, and supply chain management. (Nurmilaakso, 2008).

E-SCM is one of the strategies that helps e-commerce enterprises do this. It is the act of carrying out the SCM process using the internet and computer programmes. In order to meet customer expectations and increase volume, e-commerce has hastened the supply chain process. Customer satisfaction and internet inventory management are both unique features. In the supply chain process, they want effective logistic development. The e-commerce company SCM system removes distributors and manufacturers from the picture in the B2C paradigm. Inventory control is a crucial aspect of supply chain management. The traditional inventory model has been shifting since the internet's inception. When a company uses its own warehouse to sell products directly to customers, this is the traditional way of inventory management. (Kayikci, 2018).

However, this is no longer the most effective form of logistics. Recently, the method of risk-pooling has proven to be beneficial to the entire supply chain. (Yang, 2012).

In this method, e-commerce enterprises outsource their inventory to a larger wholesaler rather of keeping their own inventory. This reduces the danger of e-commerce enterprises holding their own inventory. Furthermore, it advantages the wholesaler by allowing them to charge somewhat higher inventory prices and serve a bigger customer base (retailers).(Patil&Divekar, 2014).

Despite the many advantages of using a risk-pooling strategy, almost three-quarters of internet retailers still use the traditional logistic method. (Kayikci, 2018).

Furthermore, an increasing number of e-businesses, particularly those that are new to the industry, are using the drop shipping strategy for inventories. A store in this model does not stock the products it offers on its website; instead, it buys them from a third party and ships them to clients.(Yang, 2012).

The e-commerce industry has a supply chain management framework that includes reverse logistics. The planning and execution of the transportation of commodities from the point of consumption to the site of origin is referred to as reverse logistics. (Elmas&Erdoğmuş, 2011).

Because practically all e-commerce websites allow for exchanges and returns, the requirement for logistics will eventually grow. There are some functional differences between traditional and e-commerce logistics. The traditional retail model, for the most part, does not provide the user with a convenient return option. E-retailers, on the other hand, take extra precautions to ensure that goods are delivered safely from customers to the vendor's warehouse. As a result,



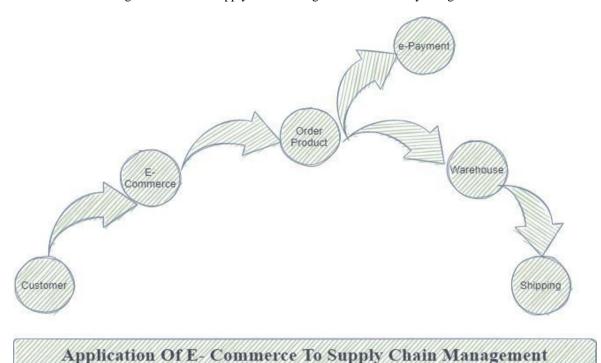
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many large and established e-commerce companies, such as Amazon and Flipkart, have developed their own logistics service, recognising the importance of logistics in the e-commerce industry. The current supply chain process has changed dramatically from the supply chain scenario of previous decades. Retailers are ensuring that the supply chain process is optimised through the application of cutting-edge technology. (Laudon &Traver, 2013).

In today's world, supply chains are considerably more organised, provide excellent customer service, and aid in cost reduction. Artificial intelligence has aided supply chain management evolution by using automation.



The backbone of e-commerce management is the supply chain. The consumer-driven market, more commonly known as e-commerce, has a reasonable process that begins with the consumer browsing and ordering the most appropriate products for him based on his taste and preferences from an e-commerce site which is connected to a virtual payment gate, Then there's the role of the supply chain in getting the goods to the customer, commonly known as last mile delivery.

SIGNIFICANCE OF SUPPLY CHAIN MANAGEMENT IN E-COMMERCE:

There are three main reasons why a good ecommerce supply chain strategy is necessary,

1. To guarantee that supply is available and that good service levels are maintained.

The online market is very open. Customers may find out if a product is in stock and how long it will take to arrive with a single mouse click. As a result, stock availability is a critical aspect of ecommerce success.

Customers' expectations of rapid gratification have been fueled by ecommerce. If you're out of stock and can't fulfill customer orders, it's easier than ever for them to discover a competition who can. Just one out-of-stock item can result in abandoned baskets, lost sales of ancillary items, and former devoted consumers taking their business elsewhere.

Effective supply chain management ensures that things move as quickly as possible from the manufacturer to the end customer. This could include multi-channel operations or worldwide shipping. Order fulfillment should be a primary purpose at the heart of every ecommerce firm, regardless of the hurdles.

2. To encourage good consumer feedback and a positive brand image

Online reviews are, without a doubt, a major factor in ecommerce sales. Customer reviews, which are impacted by their customer experience, are becoming increasingly important in determining your brand's reputation. Customer feedback, such as price comparison, have an impact on online product positioning. When it comes to displaying your products on



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search engines, reviews are taken into account, and marketplaces like eBay and Amazon allow customers to sort by recommendations.

Ecommerce businesses are especially sensitive to negative comments because many online venues encourage client reviews. As a result, it's critical that you provide a positive purchasing experience and maintain consumer satisfaction. Effective supply chain management is the backbone of your ecommerce business, whether you deliver-to-door or offer click-and-collect services.

3. To achieve cost savings that supports the company's mission.

The ecommerce industry is very competitive in many industries, and shoppers are price sensitive, using comparison websites to locate the best bargain. Supply chain operations must be as cost-effective as feasible when margins are tight. To do this, you must ensure that your inventory management systems are optimized for ecommerce.

It's a frequent fallacy that high inventory levels are required to attain excellent service standards, such as filling every request. In actuality, inventory eats up operating capital that could be better spent on things like sales and marketing, temporary workers, or trying out new items. Excess inventory necessitates more storage space, and if it does not sell, it can quickly become obsolete. At best, you might be able to sell these lines at a loss, reducing profit margins. In the worst-case scenario, you may have to write off the stock entirely.

The most important aspects of ecommerce supply chain management

To establish an effective supply chain that services an online firm, many components must come together. These are some of them:

Planning:

Having a thorough awareness of your business environment is the first step in developing a successful ecommerce supply chain strategy. There are numerous demand and supply aspects that must be considered. Can you, for example, estimate demand accurately, and how do you manage the dangers of lead time delays? The list goes on and on.

Sourcing:

Some ecommerce businesses have a complicated network of global manufacturers, while others drop-ship from their suppliers. Obtaining high-quality goods at a reasonable price is critical to ecommerce competitiveness, regardless of your company's contractual needs.

Logistics:

Ecommerce organizations must examine the cost, speed, dependability, security, and sustainability of moving inventory around the supply chain, whether it's raw materials, parts, or finished goods.

Data management:

Data is key, and it helps companies to see what's going on at every stage of their ecommerce supply chain. Data contributes to enhance efficiencies at all levels, from website analytics that provide insights into buying behavior to real-time stock management that provides absolute transparency over SKU levels.

Returns:

Having a simple returns process is vital for customers who desire ease and choice, but it's also critical for your internal operations to work smoothly. The rise of omni-channel commerce and worldwide markets has made achieving this more difficult.

The key to successful ecommerce supply chain management

The requirement to balance demand and supply is at the heart of each of these supply chain management components, such as ensuring that the upstream supply of inventory from suppliers matches the downstream demand from customers. At each stage of the supply chain, this entails optimizing inventory levels. One approach to accomplish this is to implement inventory optimization techniques. Inventory optimization is the art of balancing inventory investment with the necessity to keep adequate stock on hand to provide excellent service.

Ecommerce inventory management that is optimized entails:

• Demand forecasting that considers demand patterns throughout the course of a product's life cycle, market trends, seasonality, and promotions.



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- To free up working capital, classify inventory products and define stocking policies so you may priorities the items you have in stock based on their worth, pick frequency, and order lead times.
- Calculating reorder points and safety stock levels to drastically reduce the probability of stock outs.
- Increasing supply chain efficiency by reducing the impact of unpredictable supplier lead times and ordering constraints.

CONCLUSION:

In light of the objective, it can be stated that inventory management for an online e-commerce B2C firm is just as critical as or even more necessary than maintaining a glossy and attractive user-friendly website.

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