# Importance of Supply Chain Management for Enhancing the Quality of Product

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#### Abstract

In this study, the importance of strategies that aim to deal with supply chain management has been discussed. The main purpose of this study is to improve the quality of the products by enhancing the supply chain of the organizations. However, certain problems that have been associated with the management of the supply chain have been analysed by focusing on separate ways that can be implemented in order to solve these problems to ensure smooth operations. In the introduction section, the background of this supply chain management has been discussed followed by the problems faced in this area. The objectives of this study have given light to numerous factors that can enhance the quality of the products to improve the brand image of an organization. In the literature review section, the importance of enhancing the quality of the products has been discussed with an emphasis on the role of the supply chain employed by an organization. It has been analysed that the supply chain of an organization plays a significant role in satisfying the needs of the internal as well as external stakeholders of an organization. In the methodology section, secondary data collection has been conducted in the form of thematic analysis. These themes have helped to analyse the ways in which the operation of the supply chain can be improved by an organization. In addition, a range of factors that influence the better operation of Article History the supply chain to improve the quality of the products have also been given light Article Received: 22 April 2022 in this section of this research work. Furthermore, a few recommendations have **Revised:** 10 May 2022 also been discussed that can be implemented to improve the future performance of Accepted: 15 June 2022 an organization. Publication: 19 July 2022 Keywords: Supply chain management, quality of the products, Smooth operations

#### Introduction

The meaning of the supply chain is the basics of marketing which means from the basic to the final step which should be followed by the deals such as collecting the raw material to hand over the product to the customer. In this total process, the raw materials have to be collected first then the products need to be washed and sent for the further process and ultimately these products should be sent to the market for sale to customers. As an example, in the food industry, Nestle is a live example of the production of chocolates and many beverages they are supplied to customers worldwide. In case of dark chocolate production the cocoa bean is selected individually from Ghana and then the bean is ground with the help of a grinder and the further process should be done under the strict rules and regulations after the product is ready, it is tested into food laboratory and then it is released for the packaging and food

standardisation marks is given to every single packet and then the product is sent to the deals and deals are send these things to the markets or shops and then these products are ready for the sale to the customers.

# Literature review

# Supply chain management evolution

The supply chain may cover the following steps such as: - planning, sourcing, manufacturing, delivery, and the last but not least that is returned in case of any default. In the ancient period, the method of the supply chain was different, in that time the procedures were not considered an important part, as at that time the amount of pollution was less and the products were also pure, as every single product was produced into the home (de Oliveira et al. 2019). Now the situation has changed. The amount of pollution is increasing and the product is adulterated due to this nowadays extra effort and under strict rules and regulation, the products are produced.

The research study is showing that during the 1950 or 1960 the concept of supply chain management was unrevealed (Wamba et al. 2020). Nowadays, the concept of it is revealed and the production capacity is low due to the production companies are using their own capacity and technologies as a result of extra precaution causing a burden for the liberal production of the product. Sometimes the main issue is created in terms of purchasing. Purchasing is the main thing that is neglected and overlooked instead of giving priority to it. The main aim in this major part is to raise the production capacity which is the focusing point of an individual. Discussing and sharing the technologies and documents are not safe for any manufacturer.

The research study is showing that the managers are aware of the supply chain and they are focusing on the manufacturing, the price of the products, and the delivery systems of the products. They are also focusing on the quality of the products. The most important thing which is needed to observe most is based on the manufacturing resource planning. As the period is changed the need is also changed as a result the views are also updated as per the need. The production and the spreading of the price is a vast area so the capability of the production should be enhanced.

### Relationship between supply chain management and product quality

The relationship between the supply chain and product quality is proportional; many researchers have shown that product quality is an important and essential tool or dimension (Genovese et al. 2017). The quality of the products is required to be good and there are interrelationships between them as the quality product with minimal costing which is an important criterion for all the buyers is always observed. The product quality needs to be good and as the quality is high the supply chain will rise. Consideration should be provided to the developers who are in collaboration with the manufacturer, the suppliers, and the customers for working together and improving the quality of the products. Research study has shown that product quality and integration are bonded to each other which creates a huge impact on the supply chain and management area also. Whether the quality of the product is high quality

with less price (Govindan et al. 2021). The customer will be happy with such kinds of things. Supply of the materials in bulk may cause profit, as the production charges go down. As an example: in the case of any raw materials when bought from the market the cost is high due to this reason, if the production manager is to reach that place where the production of the particular product is produced the cost will be less.

There are a few factors which are affected the supply chain that is as follows:

Environmental uncertainty is a major factor that is related to the supply chain (de Camargo Fiorini et al.2017). This occurs due to less production. As an example, the research has identified that at the time of the COVID19 situation the production ran negative as a result there is no chance of profit and as a result, the supply chain was also hampered. Information technology is also an important factor in this region (Gunasekaran et al.2019). Non-updated technology also can hamper the supply chain of an individual sector. Supply chain relationship is also a basic factor that needs to be strong as this thing is used for both the production and the supply area, as it is directly proportional to the customer's review.

### Methodology

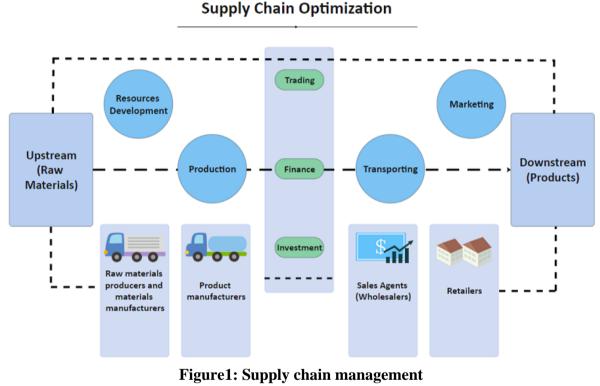
In this type of study secondary data is used, secondary data is known as that data is collected through the scholars, journals, and articles (De Angelis et al. 2018). The secondary data is based on work that is done by someone else. Secondary data is of two types 1) internal data: this type of data is collected from social media, market reports, sales reports, government journal or reports.2) External data: this type of data is collected from reports, journals, research papers, newspapers, any news articles, and scholars also. This secondary data is furtherly classified into two more groups such as qualitative data and quantitative data. Qualitative data refers to data that is based on its quality, and quantitative data is based on its measurement. In this research several research papers, journals, and scholarly articles are used in this study (Fritz et al. 2017). This study is focussing on the data and this is used for further analysis and interpreted by the people who are working in it. The further study will get help from this data and these thighs need to be elaborated for growing knowledge and this will make a sense to correlate with different topics of different research work. This is a great area to access the project and its results.

### Discussion

In this study, the topic is focused on supply management and product quality. As discussed earlier the supply management chain and the product-related are bonded to each other, the supply management is directly proportional to the product quality(Govindan et al. 2018). As the product quality is based on the production capability and environment also. Incase of environmental uncertainty, the production will decrease and as a result, the quality and supply chain will hamper (D'Eusanio et al. 2019). At the time of COVID 19 the quality of the product is decreased due to insufficient production, as the raw materials are not available in the market and this will also hamper the market situation. The supply remained decreased. At the time of buying raw materials, a bulk of products need to be bought as this will cost less than the normal market value. The relationship between the customers and suppliers will create a positive impact when a good quality product is given to them(Desore et al. 2018).

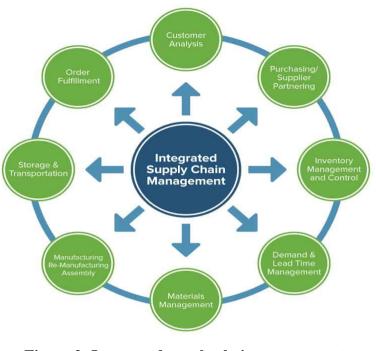
The factors are also important while the products are being supplied. In the pandemic situation, the economic situation of an individual decreases and this will make sense the capability of purchasing of an individual also decreases, as the situation is going negative way. The interrelationship between the supply chain and the product quality is based on the production and the costing (Koh et al. 2019). The lower price of a good quality product will nourish the supply chain as well and this will make a healthy and nourishing relationship ever.

### Result



(Source: Desore et al. 2018)

This diagram is showing the procedure which is followed from the raw material collection to the supply to the retailers. These following steps are maintained in all types of business industries. These steps are initial and as well as important for the regulation of the quality product.



**Figure 2: Integrated supply chain management** (Source: Fritz et al. 2019).

This figure defines the management chain and the regulation of the products and the order. The total procedure is showing how the integrated supply management is working. In the total procedure the following steps are as follows: collection of the raw material, analysis by the customers, purchasing or supplier partnering, inventory management and control will be regulated, the demand is fulfilled according to the need of the customer and the time management is also a factor in this. Material management also checked, manufacturing also handled and checked, storage and transportation also measured in this type of management work.



Figure 3: Supply chain analytics and its types (Source: - Govindan et al. 2021).

This figure shows the various types of supply chain management, and it can be classified as descriptive in that the inventory trends are sent to the customer and this can be returned on the invested capital (Fritz et al. 2019). The other type of supply chain analytics is named as diagnostics in this the problem was diagnosed in case of delayed shipment or any case of poor inventory turns that should be solved by this part. The 3rd one is predictive in this area, it is discussed how the pandemic situation, the lockdown is showing a negative impact on the production of the raw material is hampered and this is also proportional to the supply chain as well. The last one is prescriptive in this area the timing of the product launched to the country, the shipment of the product to a specific area must be needed as per the need of the customer to the and strategy must be followed for the product launch and its shipment

These graphical representations are showing that the supply chain always depends on the production of the quality product and this is the most important part of the supply chain management (Govindan et al. 2021). In the total study material, it has shown that in several matters are important for production of the quality products and that are related with supply chain management or the relation between the supply chain management and quality product are proportional. Quality products are needed by each individual with minimal costing.

The most important part of this is the regulation and the time. It has proven that during the time of pandemic, the quality of the product decreased due to the insufficient availability of the raw materials. In this area the raw material is playing a key role that is important for the production of any kind of product and this can be regulated from different states or from different countries. The unavailability of the raw material harms the production of good quality product as well as it creates a negative impact on the supply chain management that directly harms of the economic condition of the country.

Time is an important factor for the supply chain management; the time of launching a product is important not only that it is also important for the supply chain as the area of management is correlated with the customer (Wamba et al. 2020). Shipment and return of the product are always based on time. The whole study material is based on the product having good quality with minimum costing. Cost is an important criterion for the supply management as economy is an important factor in case of every single business and management industry.

### Conclusion

The ultimate conclusion is drawn on the basis of the whole research work, the research study is focused on the supply chain and the quality of the product and the whole study is all about discussing the topic. It is reflecting that the quality product is needed by the customers and the supply chain is also based on it. A low-cost high-quality product will grab the market first. The interrelationship is also a vast area to cover and a good interrelationship can make a great customer review and buying a good quality product is the main thing. A good interrelationship will be a great customer outcome to hold. This good quality product with minimal cost will provide good supply chain management.

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