

IMPACT OF JUST IN TIME AND PUSH SUPPLY CHAIN STRATEGIES ON SUPPLY CHAIN PERFORMANCE: A SYSTEMATIC REVIEW

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ABSTRACT

The distinctive qualities of a supply chain strategy demonstrate the value of considering the push and JIC strategy controversy in supply chain. Supply chains typically determine when things are manufactured, delivered to storage facilities and warehouses, and then delivered to retail establishments or shipped directly to customers. In the traditional sense, supply chains have been concentrated on utilising the enormous database of past data for forecasting future seasonal changes. This research is based on the just in case and push supply chain strategies impact on supply chain performance by exploring prior literatur. The main component of the research signifies the strategies implementation within an organization to enhance the SC performance.

Keywords: *Just in Case, Push Strategy, Supply Chain Performance.*

1. INTRODUCTION

Emerging constraints in the global supply chain were exposed by recent calamites, particularly the pandemic. Businesses struggle to find new suppliers when entire regions must shut down for weeks or months at a time [1], [2]. Other local suppliers might not satisfy manufacturer standards or be unable to accept new clients, and the essential foundation for a backup connection might not exist [3]–[5]. Nobody referred to the model as a "Just-in-case" & "Push strategy" until the 1960s [6]. It was simply the only inventory method manufacturers had ever employed [7], [8]. Before starting a production run, manufacturers ordered more materials than they need, and they produced more goods

than they anticipated to sell [9]. Costly shipping, lead times, and uncertain delivery integrity were all factors [10]–[12]. It made sense to reduce the possibility of unforeseen demand surges or supplier failure. Safety stock is given top priority in a just-in-case (JIC) inventory management plan to reduce the risk of supply chain disruptions or spikes in the price of a raw material or in customer demand for a product [13], [14]. However, in a explosive political and economic environment, these tactics come with inherent risks. The entire supply chain must go through a complete risk assessment and reassessment based on the present situation [15]. The supply-chain system needs to be regularly rebalanced when new facts and dangers are found because of how quickly these conditions might change [16]–[20]. Finding creative ways to leverage information networks to reduce risk is a critical and inventive part of business continuity planning [21]. Therefore, two supply chain strategies based research is conducted to enhance the knowledge and practices in order to increase the supply chain performance.

1.1.Problem Statement

In a volatile economy where speed and flexibility are essential for survival, resilience in meeting customer demand is essential. Many organizations have invested decades trying to make just-in-time supply chains operate efficiently [22]. However, there are inherent dangers associated with these ultra-lean techniques in a volatile political and economic environment. Additionally, because of how quickly these conditions can change, the supply-chain system needs to be continuously rebalanced when new facts and hazards are discovered [23]–[25]. A crucial and novel element of business continuity planning is finding innovative ways to use information networks to reduce risk [26]. For the purpose to find the smart way to improve supply chain performance, just-in-case and push supply chain strategy are aimed to explore in this research to introduce productive outcomes.

2. THEORETICAL FRAMEWORK

2.1. Push Supply Chain Strategy

The global business industry in which all small and big business organizations rely on the strategy of the supply chain that provide the understanding of the frequent operations of the business goals[27]–[29]. Supply chain is a process of transformation in which from raw material to create the product or item and shifted then in consumer hands [30], [31]. In supply chain strategy the push strategy is describe the actual demand of the consumers in which suppliers meet the needs and requirements of the customers as according to they want [32]. For example, if the automotive production manager get an order to manufacture customized car, he always consults with his clients

before made any thing and discuss all needs and specifications what customers asking to purchase and then it goes for production end [33], [34]. The push strategy of the supply chain giving an advantage to the business owners in which they invest their capital in production when they have confirmed customer for their product sale [35].

2.2. Just in Case

Just in case is a strategy of supply chain management in which companies makes finished goods in advance in exceeded quantities than the expected demand [36], [37]. The just in case is a traditional model of production material that companies already made products for future forecast of the demand of the customers at any time [38]. The model also explains that just in case supply chain create more stock for the future demands and make sure that the products are sufficient in inventory stock [39], [40]. The similar rule of the supply chain is just in time that is also working parallel at the just in case. The just in time is a model of supply chain in which companies stock the raw material and goods and make them at the time of the customer orders and build in according to its requirement and sell them efficiently [41], [42]. The just in case strategy of the supply chain in retail industry uses in maintaining of the large inventories in order to reduce the risk of uncertain situations of the demand at any time. In this case companies already make the product inventories for quick response of the customers but on other hand the just in case strategy is quite uncertain in many cases [43]–[45]. Most of the time the just in case strategy that create the sufficient product inventories in ware house but it is also a risk-taking method in which most of the time the demand of the market has change with the passage of time [46]. The suppliers efficiently tried to sold their build- in martial but they facing difficulties because they made stock in greater quantities but the demand in market has been decreased.

2.3. Supply Chain Performance

Supply chain performance is an activity that are held in the supply chain management functions and operations and that is defining the business activities that are related to manufacturing selling the goods and services to the customers finally [47], [48] . The supply chain performance is the last objective of the business in retail industry. The retail business industries in global business market rapidly growing and several business and investors are playing actively in retail industry [49]. The supply chain industry of the retail market in the world having opportunities because they are directly linked with consumers essentials and needs [50]–[52]. Supply chain performance thoroughly evaluate the need, demand, change of interest, cost variance and services among the consumers and developing strategic solution to be a part of the market and create its presence [53]–[57]. The successful supply chain performance of the businesses elaborating the strategic solutions of the managerial operations of the businesses [58]. It is projecting the company's strategy that they are taking to overcome the gaps and performing effective supply chain performance in retail needs [59]. Any business

profitability depending on the consumer's needs and supply chain performances. The supply chain management depending on the supply chain performance that describes the strategic evaluations and measures of the business solutions. There are number of factors are involved in supply chain management performance in retail industry in which employee's behavior towards related objective, role of managerial departments, suppliers' commitments and retailer performances [60]–[62]. These are associated factors that are linked with the performance of the supply chain in any industry and the relationship of the performance measures and management of the supply chain areas.

2.4.Operational Definitions

2.4.1. Push Supply Chain Strategy

Push strategy in supply chain management has such different policy in order to manufacture the product and it is also depending on the consumption of the customers. Push strategy estimated the demand of the customers according to their specific needs regarding the products [63]. There are number of factors that are depending in push supply chain strategy and it is only depending on the products that are few in markets or available on seasonal requirements [64]. The push demand driven strategy of the supply chain management has less brand loyalty rather the other products that are moving rapidly and in demand throughout the year for and meet the customers necessities at all level.

2.4.2. Just in case

Just in case is the term used when companies maintain large amount of inventories aiming that inventories will be sold out and will not be able to meet demands [65]. There are number of factors that are associated with just in case strategy in supply chain management because it is a risk effecting method in which supplier reliability, cost of production, ware houses capacity, storage fee, fuel cost, transportation and other unexpected consumer behavior that could be change at any time due to new product innovation in market [66]–[68]. In current business scenario, where every field of business and human life in hurry and no one assume to wait for anything and switching ultimately. In business management the rule is also applying in this way [69]–[72]. The business organizations are willing to meet the customer needs urgently and they expecting quick product deliveries from their suppliers if the suppliers are not able to provide the actual demand of the company then they automatically shifted to others because they want product on priority basis and just in case fulfill their requirement [73].

2.4.3. Supply Chain Performance

The effective and better supply chain performance create the efficient business profitability and services of the products that can make the good margins and helps to deliver best customer experiences [74]. The effective supply chain management can build the performance -based structure

that build the best supply chain trust with customers because you are providing on- time deliveries of the product with accuracy [75]. Today where every business unit of life is become more efficient and customers expecting quick delivery services from their retailers [76], the effective supply chain performance can make the possibility in all manners and provide orders on time at door step [14], [77], [78]. The supply chain performance directly related to the manufacturing of the products to the delivery to the customers [79], [80]. Through entire situation, the safe product delivery to the customers is the aim of the business parties [35], [81], [82]. Throughout this situation, the trust on retailers is one of the elements that could be possible with previous experiences related to supply chain performance from where they ordered [83]. Technology and digitalization is one of the key sources that enhance the efficiency of the supply chain performance in all industries and making the possibilities of the consumers' needs on immediate basis as per their orders [84]–[86]. The supply chain performance is the key success of the any business industry.

3. LITERATURE REVIEW

This research describe the relationship between push supply chain strategy and just in case in supply chain management. It is obvious that push supply chain strategy creates the efficiency of the suppliers manufacturing products according to the needs of the customers with specifications [87]–[89]. Just in case has its own strategic value in supply chain management. The just in case is a business model in which supplier made the products in bulk quantity in its stock and meet the customers requirements in immediate orders [90]. There are number of uncertainties are involved in this case, the pull supply chain strategy that is designed under the need of the customers with just in case that is already build in the stock has no coordination among them [91]–[93]. Market always demand frequent products that are running items and companies make them in advance in bulk but most of the time consumer needs are change in specific products [94]–[96] that could not meet the business model of the push supply chain strategy [97], [98]. The both factors are opposite to each other one is focusing on consumer specific needs while the other producing items in build without any specific features [99].

Push strategy has impact on supply chain performance as it provides grounds to predict the future and manage the supply chain accordingly [100]–[102]. The first variable the push supply chain strategy has relationship with the dependent variable that is supply chain performances [103]–[105]. The business industry focusing on all performance management measures that create the success and efficiency of the business through its supply chain management [106]. The supply chain performances describe the profitability and outcomes of the products in its operational areas [107], [108]. The efficient supply chain performance builds the all kind of supply chain models in which push strategy is included. The push strategy of the supply chain management increases the efficiency of the business

[109]–[111] that is focusing on the demand of the consumers with specific requirements [112]. The push strategy of the supply chain working effectively when supply chain performance meets all that criteria's that consumers expecting from their suppliers. The relationship between push supply chain strategy and supply chain performance parallel doing functions in business models [113]–[115]. Both independent and dependent variables effecting the performances of each other. The performance of the supply chain has impacts on all kind of the supply chain management operational areas that helps to provide the services in consumer's hands [116], [117].

Just in case and said to improve performance of supply chain. The relationship between second independent variable just in case and dependent variable supply chain performance has dependency to each other [118]–[120]. The just in case business model in supply chain management operations increased the production of the items and goods in manufacturing areas and make the huge quantity of the products in their stock [121]–[123]. The just in case model manufacturing the bulk of quantity to meet the customers requirement is immediate cases and making possibilities to happy their customers. The just in case only depending on the supply chain performances in which they need to roll in their products in market because there are number of risk factors are included with the just in case strategy [124]–[126]. The huge quantity of the products associated with many factors in which the storage cost, expiry of the products, fuel and transportation, suppliers demands and change of consumer behavior are linked [127]–[129]. These factors only can create the possibility to place in market when efficiency supply chain performance create the suitability and need of the goods in market [130]–[132]. The product availability everywhere in market that encourage to customers to buy easily is the outcome of the supply chain performance and management.

A relationship of how supply chain performance improved through applying the strategies of push and just in case [59], [133]. This research presenting the relationship of the both independent variables and dependent variable in which push supply chain strategy and just in case business model is only associated with the supply chain performance especially in retail industry [134]–[136]. The retail industry is one of the business sectors in the world that is the biggest cause of high GDP rate of the nation's economy [137], [138]. The push supply chain strategy focusing on the consumer's specific demands that are not applicable in just in case business model due to the difference in both strategies. Both stratifies working oppositely to each other but both business supply chain strategic models depending on supply chain performance of the business.

3.1 General Research Model

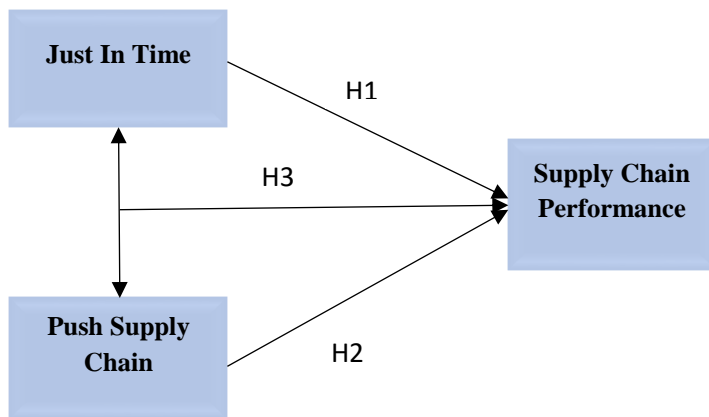


Figure 1 : Conceptual Research Model

4. DISCUSSION

A systematic review of the supply chain strategies just in case and push supply chain strategy found as productive for supply chain performance as any organization requires. An inventory management strategy known as "just-in-case" involves companies ordering more raw materials than they require and producing more goods than they anticipate selling. organizations can protect themselves from hazards such as a quick client demand or unanticipated supply chain interruptions. A just-in-case inventory approach may not appropriate for every firm, but it is still a viable option. In this research, businesses can discover how even a small step toward just-in-case inventory management and push supply chain strategy focusing on the consumer's specific demands that are not applicable in just in case business model due to the difference in both strategies. Both stratifies working oppositely to each other but both business supply chain strategic models depending on supply chain performance of the business and can assist them in hedging against supply chain risks.

5. CONCLUSION

This research concluded the supply chain performance affecting strategies on all that areas where business profitability and success is included. The both just in case and push strategy are associated with the outcomes of the organization supply chain performance because both strategic evaluations of the supply chain management nothing with the performing measures of the supply chain. The retail industry is thoroughly working with the production of the material and their possible availability in market. The pull strategy mainly creates the limited products for their customers and sold them timely

through the supplier performance and efficiency while the products that are ready in warehouse need efficient policies of supply chain performing measures that manage the finished goods on time.

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