# EXAMINE STRATEGIES FOR OPTIMIZING THE RETAIL SUPPLY CHAIN TO REDUCE COST & ENHANCE PRODUCT AVAILABILITY TO MEET CONSUMER DEMANDS

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## ABSTRACT

The term supply chain refers to the network of businesses that are engaged in the sourcing, production, and distribution of a retailer's goods. Because there are so many moving parts involved, it is imperative that retail establishments optimize each link in their supply chains in order to maximize their productivity, satisfy the needs of their customers, and keep their costs as low as possible. This is of utmost significance in the modern era, when retail enterprises are under intense pressure to provide more goods to more customers in a shorter amount of time than ever before. A reliable supply chain is critical to the success of modern retail organizations, as is the ability to optimize supply chain processes from the very beginning to the very end. It is absolutely necessary to achieve maximum performance in the retail supply chain in order to reduce costs, boost product availability, and fulfill the requirements of customers. With the assistance of a supply chain that has been completely optimized, retailers have the opportunity to improve their overall efficiency, lower their carrying costs, and reduce the amount of surplus inventory they hold.

Keywords: Retail, Supply Chain, Cost Reduction, Product Availability, Consumer Demands.

## **INTRODUCTION**

In recent years, the retail business has experienced substantial changes due to the dynamic evolution of consumer tastes and the widespread use of e-commerce. Consequently, merchants have persistent challenges to streamline their supply chains in order to save expenses and improve product accessibility, in response to the dynamic expectations of contemporary, discriminating customers. Maintaining competitiveness in a dynamic market necessitates the attainment of this intricate equilibrium. This article explores the various techniques and practices that retailers can utilize in order to optimize their supply chain operations, with the ultimate goals

of reducing costs and enhancing product availability. By effectively acquiring proficiency in these facets, merchants have the potential to not only diminish operational costs but also guarantee the availability of products to fulfill consumer demands, thereby cultivating customer allegiance and stimulating revenue expansion. In the subsequent sections, we shall examine an extensive array of strategies and optimal approaches that retailers can adopt throughout their supply chains. By embracing a comprehensive strategy to optimizing the supply chain, retailers may strategically position themselves for success in a retail environment that is characterized by intense competition and dynamic changes.

# Key Aspects for Establishing a Strong Supply Chain

- 1. Superior supply chain efficiency confers a significant advantage upon merchants seeking to minimize expenses, meet customer demand, and optimize profitability.
- 2. Retailers have the potential to capitalize on several opportunities to enhance their operational efficiency throughout the whole supply chain.
- 3. Integrated SCM software offers retailers the ability to access real-time information throughout the supply chain, enabling them to make informed decisions based on data. This technology aims to enhance operational effectiveness, optimize financial gains, and reduce expenses.

## The Significance of a Robust Retail Supply Chain

In recent times, there has been a notable shift in consumer buying behavior. The rapid expansion of electronic commerce, along with the accelerated shift to digital platforms driven by the COVID-19 pandemic, has intensified the requirement for merchants to efficiently address customer demands, while also retaining the ability to adapt to market fluctuations. As a consequence of a decline in physical retail transactions, merchants are currently confronted with the need of acquiring more comprehensive understanding of their supplier networks, warehouses, inventory levels, and logistical operations. Efficiently distributing a varied range of items to a larger number of places, including customers' dwellings and local drop-off spots, is imperative. Furthermore, it is crucial for retailers to modify their operations in order to accommodate returns from an increased number of locations, hence requiring the implementation of adaptable reverse logistics solutions.

The enhancement of retailers' competitiveness is significantly influenced by the presence of a resilient supply chain, as it provides them with a dynamic outlook on their operational activities. This allows businesses to quickly adjust to changing situations, such as rerouting shipments, moving warehouse operations to a closer and more reliable location, or managing inventory to match demand forecasts & a successful supply chain also enables retailers to efficiently manage inventory costs yield several benefits, including improved demand forecasting, efficient procurement order management in accordance with storage capacities, and the ability to decide the most advantageous timing for clearing unsold inventory.

## Methods to Enhance Retailers' Supply Chains

The construction of an efficient supply chain is an imperative undertaking. When implemented proficiently, it allows shops to meet customer demand and maximize financial profits. Conversely, an inefficient and incoherent supply chain can give rise to various adverse outcomes, including delays, challenges in inventory management, and consumer discontentment.

The aforementioned outcomes possess the capacity to exert a detrimental influence on a retailer's financial performance and place its relationships with customers at risk. For instance, a toy manufacturer that faces delays in meeting customer orders during the holiday season may confront considerable difficulties in effectively managing the logistical aspects of delayed deliveries and order cancellations. Additionally, there is a possibility of adverse consequences arising from customers who may develop apprehension towards making future purchases from the company. The following enumeration delineates eleven tactics that retailers can implement in order to optimize the efficiency and efficacy of their supply chains across the entirety of the process. The solutions outlined above emphasize the importance of attaining thorough transparency throughout all phases of the supply chain.

## Get the Most out of Efforts in Technology

You can make the retail supply chain more efficient and flexible by using the right technology. This will allow the chain to work as a smooth and flexible whole. Supply chain software can give merchants a full picture of what customers want and how much inventory they have at all times during the product's trip. A lot of retailers choose cloud-based software because it lets them collect and combine data from different areas and processes in their supply chain, making it easy to access in real time.

Being able to quickly handle large amounts of data lets companies constantly make predictions and evaluate their stock, using the most up-to-date information available to them. Some shops also use AI and machine learning systems to look at data. These systems use both new and old data, which lets them look at huge amounts of information and make accurate predictions about what customers will want and what problems might arise in a store's process. This makes it easier for merchants to build a flexible supply chain, which lets them react quickly to changes in the market and prepare for unplanned setbacks.

# Make Plans for Source Tagging and Radio Frequency Identification (RFID)

Completely tracking items at every step of their journey is a very good way to figure out how efficient a store's supply chain is at running its business. A method called "source tagging" is used by many merchants to keep track of goods from the time they are made and stored until they are sold. This lets the merchants know exactly where the goods are at any given time.

When you put an intelligent sticker or barcode on a product, this is called source tagging. The above-mentioned tag not only makes it easier for managers to keep an eye on products as they move through their supply lines, but it also lets them quickly alert store employees if someone tries to steal goods from the store. An interesting combination is source tagging used with radio frequency identification (RFID) technology, which uses electromagnetic fields to keep track of goods and stop theft.

When source tagging and RFID technology are used together, they give businesses complete and accurate information about their entire product supply chains. Modern tagging methods, like electronic article surveillance, make tracking easier by giving you real-time information about goods across the whole supply chain and information about what customers want. This information could include the number of products that are currently in stock and can

be bought online, as well as the number of products that need to be ordered to restock shop shelves.

## **Boost Prediction Accuracy**

Utilizing accurate forecasting methods makes it easier to predict how customers will buy things, including figuring out which goods they love and how many of them they need. With this useful information, stores can better match their stock with what customers want, which helps them meet customer wants and plan for future revenue streams. Also, being able to make accurate predictions helps retailers handle their inventory strategically, making sure they don't have too much or too little of it. This optimization helps stores make the most money by finding the best balance between keeping product levels low and high enough to meet customer demand.

Demand forecasting is an important part of accurate product management. Accurate forecasting is very important for retailers because it helps them keep the right amount of inventory on hand, which maximizes sales chances while minimizing the risks and costs of having too much stock.

# **Consider Nearby Sources**

The expenses associated with shipping and transportation constitute a significant percentage of a retailer's supply chain. While numerous firms are compelled to acquire raw materials from international sources, some have the opportunity to effectively manage their transportation and distribution expenses by procuring products locally. In addition, the practice of sourcing locally often leads to expedited delivery times for clients, thereby cultivating a sense of trust and encouraging repeat purchases.

# Ensure that everyone along the Supply Chain is in the Loo

When a company grows, it inevitably faces new obstacles, particularly in the area of managing a complicated retail supply chain. The most important step in overcoming these obstacles is to make certain that each phase of the product journey is integrated, and that all of the participating teams maintain frequent and open communication with one another.

When a company learns more about the requirements of the various stakeholders located along the supply chain, it obtains a more comprehensive understanding of the ways in which the performance of every department that is a part of the chain may be enhanced. When brought together, these insights have the potential to result in increased supply chain output at lower overall costs.

# **Track Performance with Large Amounts of Data**

The key to successful optimization of a supply chain is making well-informed decisions that are supported by comprehensive data. Due to the sheer amount of data that is being processed, managing it by hand effectively is an extremely difficult task. This type of analysis can help retailers find the best methods to optimize their supply chain processes. It's likely that computerizing these processes will be absolutely necessary to our achievement of success.

#### **Automate Warehouses**

Retailers commonly employ automation techniques to effectively oversee the logistics of product flow within their warehouses. This enables merchants to enhance the efficiency of item processing, mitigate the risk of errors, and alleviate the burden of labor-intensive jobs for warehouse personnel. To facilitate the automated transportation of bulky objects from a designated area within a warehouse to a shipping bay, the utilization of autonomous robotic systems may be deemed essential. Likewise, the utilization of warehouse automation software can be employed to document the displacement of a retailer's stock. This transfer of the labor-intensive responsibility of monitoring inventory movement is shifted from human workers to a computer program, which is capable of completing the task within a few seconds. Retailers possess the choice to procure their own automation technologies or establish collaborations with third-party entities for the acquisition of such solutions. Merchants have the option to utilize the warehouse management platform provided by an IT vendor in order to effectively monitor inventory data. Alternatively, they may choose to rent autonomous warehouse robots instead of developing and managing such devices internally. This would enable merchants to optimize their resource allocation and cost-efficiency.

#### **Examine Various Approaches of Setting Prices**

Retailers inherently strive to optimize their financial gains by minimizing costs, although their ultimate approach to pricing is contingent upon several factors, including the expenses associated with procuring products and the pricing strategies adopted by competitors offering similar or equivalent goods. Pricing may also change and develop depending on market conditions. For instance, after the rush of customers during the holiday shopping season, clothing and technology retailers typically offer steep discounts on their wares in the month of January. This allows them to get rid of their excess inventory and make space in their warehouses and stores for the upcoming season's goods.

The objective is to make continuous adjustments to price in order to find the sweet spot that strikes the optimal balance between preparing for long-term income and generating instant gains. The creation of a private label for in-house manufactured goods is a strategy that is frequently utilized by retail establishments. White labeling is a strategy that provides retailers greater autonomy and control over how they price their items in comparison to the old method of buying things at wholesale costs and marking them up by 50% before selling them. This method is traditionally known as the markup. When it comes to selling big quantities of products at scale, white labeling is typically most effective. This is because merchants typically need to move higher volumes of products in order to fulfill their profit goals when using more competitive pricing.

#### Do Not Overlook the Importance of Reverse Logistics

There are occasions when clients alter their minds. Sometimes they will purchase a sweater in many sizes before they locate the one that is the perfect fit. And there's always the possibility that they'll get defective or otherwise unacceptable things that they won't want to keep. Returns are an unavoidable part of doing business for every retailer, regardless of the

cause. Enter the concept of reverse logistics, which enables shops to collect things that have been returned by customers and send them back to the seller or manufacturer who originally sold them. In the contemporary era of e-commerce, whereby a customer's perception of a vendor is shaped by each interaction ranging from purchases to product returns, it is imperative for businesses to establish an efficient protocol for their reverse logistics operations. Two essential components of reverse logistics encompass the provision of return labels for each online purchase and the subsequent processing of refunds. These operations are integral to the broader framework of reverse logistics. Additional procedures involve the examination of returned items and the dispatch of replacement products as a means of exchange. Due to the increased complexity associated with accepting returns at drop-shipping locations and residential addresses compared to brick-and-mortar stores, some retailers perceive value in establishing partnerships with third-party logistics businesses (3PLs) that possess specialized expertise in effectively managing the logistical aspects of the return process.

## Align the Management of Marketing and the Supply Chain

This is especially true regarding the relationship that exists between the marketing and sales teams and the supply chain management. The marketing and sales departments collect crucial insights on the behavior of customers, which assists the supply chain teams in precisely preparing to satisfy the demands of customers. For instance, buyers who sign up for a waiting list for a new product anticipate that they will be able to purchase the product as soon as it becomes available on the market, and they anticipate receiving it right away. Therefore, it is necessary for retailers to ensure that they obtain a sufficient quantity of products to meet those expectations.

## **REVIEW LITERATURE**

(Abernathy, et al. 2000), examined the transformative impact of information technology on retailing and supply chains. The authors discuss how the emergence of the information age has revolutionized these sectors. The authors highlighted the central role of information technology in reshaping retailing and supply chains. They may discuss the adoption of technologies like the internet, electronic data interchange (EDI), and various software solutions to streamline operations and improve communication within the supply chain. Study explored how information technology has facilitated better integration among supply chain partners, leading to improved collaboration, coordination, and efficiency. This integration might encompass suppliers, manufacturers, distributors, and retailers (Abernathy, et al. 2000). In the information age, the paper may argue that businesses have shifted towards a more consumercentric approach. They may discuss how technology enables companies to better understand consumer preferences, forecast demand, and customize their offerings to meet individual customer needs. The authors discussed how technology has enabled more effective supply chain management, with the ability to monitor inventory levels, track products in real-time, and optimize logistics, ultimately reducing costs and enhancing customer service. The research touched upon the challenges and implications of the information age on retailing and supply chains. This involved issues such as data security, the need for skilled IT professionals, and the potential for increased competition.

(Madhani, 2021), explored strategies to improve efficiency and effectiveness in retail supply chain management with a focus on the customer. Study emphasized the importance of

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aligning retail supply chain management with customer needs and expectations. This approach involved tailoring supply chain operations to deliver products and services that meet customer demands effectively. Author discussed strategies for improving the effectiveness of the retail supply chain, ensuring that it not only operates efficiently but also delivers the right products to the right customers in a timely and accurate manner. Customer-focused supply chain improvements ultimately lead to higher customer satisfaction, loyalty, and retention. Satisfied customers are more likely to return and make repeat purchases. The authors touched upon how adopting a customer-focused approach can give retailers a competitive advantage in the market, as it enables them to differentiate themselves from competitors and meet evolving customer preferences effectively. It also addressed challenges and considerations in implementing a customer-centric approach to supply chain management, such as technology adoption, data analytics, and organizational culture. The study provided insights into how a customer-focused approach can enhance the efficiency and effectiveness of retail supply chain management, leading to improved customer satisfaction and a competitive edge in the retail industry.

(Salam, et al. 2016) examined the impact of inventory storage on service levels in the retail supply chain. The paper discusses how effective inventory management and storage practices are crucial in ensuring that retailers can meet customer demand and maintain high service levels. The study explores various factors that influence service levels, such as inventory placement and allocation. It provides insights into the relationship between inventory storage strategies and the overall performance of the retail supply chain, shedding light on the importance of efficient inventory management in delivering satisfactory customer service in the retail sector.

(Khan. et al., 2012) presented a case study that explores the alignment of product design with the supply chain. The paper focuses on the importance of integrating product design considerations with supply chain planning and execution. The case study highlights real-world examples of how companies can improve their supply chain performance by proactively designing products that are compatible with the existing supply chain infrastructure. It offers insights into the challenges, benefits, and strategies for effectively aligning product design and supply chain management, emphasizing the significance of this alignment in achieving supply chain efficiency and competitiveness Goyal, (2016).

(Mathu, et al., 2018) investigated the impact of collaboration and integration within the supply chain on the ability of fast-moving consumer goods (FMCG) manufacturers and retailers to meet customer demands effectively. The study emphasizes the crucial role of cooperation and seamless coordination between manufacturers and retailers in the FMCG sector. The authors argued that through supply chain collaboration and integration, FMCG businesses can better respond to customer requirements. The paper likely discusses how these practices enable improved demand forecasting, reduced lead times, optimized inventory management, and enhanced communication throughout the supply chain. By aligning their operations and working closely together, manufacturers and retailers can ensure that products are readily available to meet consumer needs, thereby improving customer satisfaction and overall supply chain performance.

## **RESEARCH METHODOLOGY**

The descriptive research design has been used. Both secondary & primary data has been gathered from various sources. Secondary data captured from websites, published articles,

journals etc. The primary data has been collected from 03 supply chain based retail companies with a sample size of 167. Although more than 200 responses received but 167 was completely filled & in readable position. SPSS has been used for data analysis & results.

## **Objective of the Study**

- 1. To explore strategies related to retail supply chain which reduces cost & enhance product availability to meet consumer demands.
- 2. To analyse the explored strategies related to retail supply chain which reduces cost & enhance product availability to meet consumer demands.

# Hypothesis of the Study

 $H_1$ : There are no significant strategies related to retail supply chain which reduces cost & enhance product availability to meet consumer demands.

 $H_2$ : There are no significant strategies related to retail supply chain which reduces cost & enhance product availability to meet consumer demands.

Table 1       AGE_WISE RESPONDENTS DISTRIBUTION							
Age Frequency Percentage (%)							
24-28	11	6.58					
29-32	42	25.14					
33-36	69	41.31					
37-40	27	16.16					
Above 40	18	10.77					
Total	167	100%					

# **RESULTS AND DISCUSSION**

Table 1 analyse the age\_wise distribution of the respondents & indicated that the majority of respondents belonging the age group of of 33-36 years (n=69, 41.31%) followed by 29-32 years (n=42, 25.14%). Respondents at the age of 24-28 years (n=11, 6.58%) found to be least.

Table 2       GENDER_WISE RESPONDENTS DISTRIBUTION						
Gender_wise	Frequency	Percentage				
Male	115	68.86				
Female	52	31.13				
Total	167	100%				

Table 2 analyse the gender\_wise distribution of the respondents & indicated that the majority of respondents belonging the male group (n=115, 68.86%) & female respondents (n=52, 31.13%) found to be least.

Table 3 MARITAL STATUS						
Marital_Status	Frequency	Percentage				
Single	69	41.31				
Married	85	50.89				
Others	13	7.78				

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Total	167	100%

Table 3 analyse the marital status distribution of the respondents & indicated that the majority of respondents belonging the married group (n=85, 50.89%) followed by single group (n=69, 41.31%) & others respondents (n=13, 7.78%) found to be least Lee, (2002).

Table 4       EDUCATIONAL QUALIFICATION					
Educational_Qualification	Frequency	Percentage			
Graduate	89	53.29			
Post_graduate	45	26.94			
Other Professional degree/Dioploma/Certificate	33	19.76			
Programs					
Total	167	100%			

Table 4 analyse the educational qualification wise distribution of the respondents & indicated that the majority of respondents belonging the graduate group (n=89, 53.29%) followed by post-graduate group (n=45, 26.94%) & other professional qualification of respondents (n=33, 19.76%) found to be least.

Table 5 FAMILY'S ANNUAL INCOME						
Family's Annual Income	Frequency	Percentage				
5,00,001 - 7,00,000	43	25.74				
8,00,001 - 10,00,000	96	57.48				
Above 11,00,000	28	16.76				
Total	167	100%				

Table 5 analyse the family's annual income wise distribution of the respondents & indicated that the majority of respondents belonging the (8,00,001 - 10,00,000) group having (n=96, 57.48%) followed by (5,00,001 - 7,00,000) group having (n=43, 25.74%) & other (Above 11,00,000) of respondents (n=28, 16.76%) found to be least.

Table 6 RELIABILITY STATISTICS				
Cronbach's Alpha	Number of Items			
0.796	11			

Table 6 shows the reliability statistics analysis findings, which show that the Cronbach Alpha test got a value of 0.796 (N=11), exceeding the set criteria of 0.60. As a result, there is a noteworthy presence of internal consistency across the variables under consideration, allowing for the potential of running additional statistical tests to facilitate a more comprehensive study Sulhan et al. (2018).

Table 7   DESCRIPTIVE_STATISTICS (DS)							
	N Minimum Maximum Mean Std. Deviation						
1,	Predicting and meeting demand through planning	167	1	5	3.68	.4113	

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2,	Inventory management & systems	167	1	5	3.81	.4782
3.	Relationships with vendors	167	1	5	4.19	
4.	Transport and logistical considerations	167	1	5	3.79	.3998
5.	Effectiveness of the warehouse	167	1	5	4.13	.2117
6.	Intersection of technology and analytic	167	1	5	4.27	.2103
	methods					
7.	Sustainable Practices	167	1	5	4.58	.2041
8.	Contant Improvement	167	1	5	3.46	.3987
9.	Administration of risk	167	1	5	4.81	.2001
10.	Approach that is focused on the	167	1	5	3.78	.3534
	customer					
11.	Collaboration across functional	167	1	5	4.93	.2126
	boundaries					
	Valid N (listwise)	167				

Descriptive numbers can be seen in Table 7. Measures of central tendency (such as mean & median) and measures of variability (such as standard deviation & range) are examples of descriptive statistics used to summarize and characterize the principal features of a dataset. The minimal score for each test, as given by any respondent, is shown in the minimum column, while the maximum score, as given by any respondent, is shown in the maximum column. Table 7 analysed the data through descriptive statistics for this study "Examine strategies for optimizing the retail supply chain to reduce cost & enhance product availability to meet consumer demands". The table 7 findings indicated that the strategies "*Collaboration across functional boundaries*" having highest mean values i.e. (4.93) & standard\_deviation (.2126) followed by "*Administration of risk*" having mean values i.e. (4.81) & standard\_deviation (.2001). But the strategies "Predicting and meeting demand through planning" having lowest values (M= 3.68, S.D. =0.4113) which indicate that this strategy does not affect more in comparison to other strategies under the study.

	Table 8   ONE-SAMPLE STATISTICS						
S.No.	Variables/Strategies	Ν	Mean	Std. Deviation	Std. Error Mean		
1.	Predicting and meeting demand through	167	3.68	.4113	.018		
	planning						
2.	Inventory management & systems	167	3.81	.4782	.027		
3.	Relationships with vendors	167	4.19		.032		
4.	Transport and logistical considerations	167	3.79	.3998	.029		
5.	Effectiveness of the warehouse	167	4.13	.2117	.021		
6.	Intersection of technology and analytic	167	4.27	.2103	.034		
	methods						
7.	Sustainable Practices	167	4.58	.2041	.038		
8.	Contant Improvement	167	3.46	.3987	.040		
9.	Administration of risk	167	4.81	.2001	.043		
10.	Approach that is focused on the customer	167	3.78	.3534	.037		
11.	Collaboration across functional	167	4.93	.2126	.030		
	boundaries						

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Table 8 analysed the data through one sample statistics for this study "Examine strategies for optimizing the retail supply chain to reduce cost & enhance product availability to meet consumer demands". The table 3 findings indicated that the strategies "Collaboration across functional boundaries" having highest mean values i.e. (4.93), standard\_deviation (.2126) & standard\_Err (.030) followed by "Administration of risk" having mean values i.e. (4.81), standard\_deviation (.2001) & standard\_Err (.043). But the strategies "Predicting and meeting demand through planning" having lowest values (M= 3.68, S.D. = .4113, S.Err.= .018) which indicate that this strategy does not affect more in comparison to other strategies under the study.

Table 9 ONE-SAMPLE TEST								
		Test Value = 0						
		95% Confidence Inter the Difference						
	Т	Df	Sig. (2-tailed)	Difference	Lower	Upper		
Predicting and meeting demand through planning	82.715	166	0.000	2.101	3.01	3.23		
Inventory management & systems	93.661	166	0.000	2.118	2.98	3.19		
Relationships with vendors	127.678	166	0.000	3.227	2.17	2.69		
Transport and logistical considerations	89.657	166	0.000	2.398	2.02	2.81		
Effectiveness of the warehouse	92.672	166	0.000	3.378	1.96	2.79		
Intersection of technology and analytic methods	117.982	166	0.000	3.402	2.79	3.65		
Sustainable Practices	109.945	166	0.000	2.876	2.61	3.72		
Contant Improvement	97.892	166	0.000	2.986	1.76	2.82		
Administration of risk	151.022	166	0.000	3.352	2.64	3.56		
Approach that is focused on the customer	102.367	166	0.000	3.178	1.87	2.27		
Collaboration across functional boundaries	172.301	166	0.000	3.456	2.77	3.21		

The results of the One-Sample T test are presented in Table 9. This statistical test is employed to determine if there is a significant difference between the mean of a sample and a known or hypothesized population mean. The significance level (two-tailed) provides the p-value for each test, representing the probability of obtaining a T-value that is as extreme or more extreme than the observed value, if the null hypothesis is true. In statistical analysis, a p-value that is below the threshold of 0.05 is commonly considered to be indicative of statistical significance. The strategy "Collaboration across functional boundaries " has the highest T-test value (172.301), followed by Administration of risk having T-test value (151.022), while the strategy "82.715" has the lowest T-test value i.e. (82.715) under the study.

# **Hypothesis Testing**

By using SPSS, the findings of the above research projected that null hypothesis "there are no significant strategies related to retail supply chain which reduces cost & enhance product

availability to meet consumer demands" is rejected and alternative hypothesis "there are significant strategies related to retail supply chain which reduces cost & enhance product availability to meet consumer demands " is accepted.

### **Findings & Recommendations**

- 1. The process of optimizing the retail supply chain is a continual endeavor that calls for ongoing monitoring and the ability to readily adjust to shifting market conditions. Retailers that place a greater emphasis on reducing costs and effectively satisfying client requirements are more likely to prioritize efficiency, flexibility, and satisfaction of their customers.
- 2. For an accurate demand forecast, you should make use of both advanced analytics and historical data. The accuracy of demand projections may be improved through the use of machine learning and artificial intelligence. Maintain good working relationships with your vendors, discuss your demand projections with them, and make sure they are ready to handle shifts in customer need.
- 3. Just-in-time, or JIT, inventory systems can help cut down on both excess inventory and the costs associated with carrying it. Apply the ABC analysis in order to categorize products according to the importance of those products, and then change supply levels accordingly.
- 4. It may be beneficial to lessen the need for warehousing by considering dropshipping for certain products. Create dependable, cooperative working relationships with your suppliers in order to enhance communication and cut down on lead times.
- 5. To reduce the risks that are associated with relying on a single supplier, dual-sourcing techniques should be considered. To cut down on shipping expenses, transportation routes and modes should be optimized.
- 6. To improve delivery efficiency, make use of various technological tools, such as software for route planning and GPS tracking. Shipments should be consolidated whenever possible, and third-party logistics (3PL) providers should be used.
- 7. Improving procedures like as picking, packing, and sorting can be accomplished with the use of automation and robotics. Utilize data analytics to devise the most effective plan for the warehouse, taking into account product positioning.
- 8. Implementing effective procedures for tracking inventory can help cut down on errors and enhance accuracy. Make an investment in software and systems for supply chain management that will enable visibility in real time on inventory levels, the status of orders, and the performance of suppliers.
- 9. Utilize data analytics to determine patterns, points of bottlenecking, and weak spots in the supply chain so that you can make improvements.
- 10. The acronym CPFR stands for collaborative planning, forecasting, and replenishment.
- 11. Maintain close working relationships with your most important suppliers and regularly exchange data in order to better adapt your production and delivery schedules to changes in customer demand.
- 12. If you want to lessen your influence on the environment and cut down on your running costs, you should investigate sustainable sourcing and transportation choices. It is important for warehouses and retail establishments to have recycling and waste reduction strategies in place.
- 13. Encourage staff to recognize and fix areas of inefficiency within the business by instituting a culture of continuous improvement and giving them the tools to do so.
- 14. Evaluations of performance should be done on a regular basis, and comparisons should be made to industry norms.
- 15. Create a plan for mitigating risks in order to deal with potential sources of disruption, such as natural disasters or events in the geopolitical sphere. Maintain enough stocks of safety stock for essential items in order to effectively manage unanticipated spikes in demand.
- 16. Keep an eye on the comments and preferences left by customers so that you can swiftly adjust the supply chain to meet the shifting needs of customers.
- 17. To increase the level of client satisfaction and retention, provide convenient delivery choices, such as clickand-collect or delivery on the same day. Encourage collaboration across the many divisions within the firm, such as marketing, sales, and supply chain, in order to guarantee that the organization is aligned with the wants of its customers.

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