

THE IMPROVEMENT OF LOGISTICS AND SUPPLY CHAIN MANAGEMENT IN FAN MILK PLC IN NIGERIA

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Summary

Logistics and Supply chain management (SCM) is one of the fastest expanding industries in the world, with over a billion individuals. SCM experts are concerned with the correct supply chain architecture to efficiently serve clients (via improved customer service) (at low costs). Obtaining this is tough currently due to issues such as raw material scarcity, government policies, and increased unpredictability on both demand and supply sides. Managing uncertainty is crucial in supply chain design. According to Lovejoy (1998), a corporation can deal with uncertainty by maintaining a safety inventory, maintaining a safety capacity, or reducing variability by using more information and technology. As a result, the supply chain's decision-making methods must be adaptive. This report will examine methods to improve supply chain performance at Fan Milk Plc by analyzing present conditions. It will also conduct a SWOT analysis to assess the company's potential for growth. According to the study's findings, if Fan Milk Plc improves supply chain management, it may be able to optimize profits. A large investment in agriculture would not only provide alternative raw resources but also assist the firm maintain market dominance.

Keywords: Logistics management, Supply chain management, improvement

Introduction

The changing nature of the market in the twenty-first century has increased the demand for more competitive growth strategies (Sanchez and Perez, 2015). Apart from customer pressure, which now dictates the type of commodity produced, businesses in Nigeria are increasingly exposed to unexpected shocks and discontinuities from the government, competitors, and the dramatic increase in the price of raw materials used in production. Hence, Logistics and Supply chain management is a broad term that refers to a collection of actions used to manage various entities within an organization, including suppliers, procurement processes, production, product delivery, information flow, and customer demand (Christopher, 2012; Lambert, 2018).

Fan Milk Plc is West Africa's leading manufacturer and retailer of ice cream and frozen dairy products. Along with providing dairy milk to the public, Fan milk Plc is committed to promoting a healthy lifestyle through its products. However, the company's logistics and supply chain are under threat today due to a variety of factors, including the high cost of raw materials, a series of political factors, and inadequate infrastructure. As a result, in order to continue serving the public, this organization's logistics supply chain management must be improved.

Given the numerous factors impeding the logistics supply chain management success at Fan Milk Plc, there is a need for a study that focuses on how the logistics supply chain can be improved to more effectively provide quality products to the public. As previously stated, a supply chain is a collection of value-adding activities that connect an enterprise's suppliers and customers. The supply chain principle is as follows: receive input from a firm's suppliers – add value – deliver to customers (Camilleri, 2017). Consider the benefits that Logistics and Supply Chain Management can provide, particularly in the process of reaching end customers from the factory; the company experiences a decline in sales as a result of the increment in the price of products which stem from the increment in the price of raw materials used. Customers want to experience more of the company's product, style, creativity, preference, comfort, and efficiency at a lower cost, effort, time, and risk, as well as invest less time, effort, and risk.

Research aim: To analyze the “Fan Milk Plc” logistics and supply chain management and to propose potential methods for increasing the efficiency of Fan Milk Plc's services through the improvement of its logistics and supply chain management.

The following **objectives** have been set to achieve the aim:

1. To summarize the theoretical concepts of logistics and supply chain management;
2. To analyse the current situation in the logistics and supply chain management and to determine the main problems in the Fan Milk Plc;
3. To analyze the challenges and key factors that influences the logistics and supply chain process of Fan Milk Plc;
4. To suggest possible solutions for the improvement of logistics and supply chain management in Fan Milk Plc.

Research object and methods

The nature of this research, which entails an examination of the available literature on logistics and supply chain management, necessitates the use of secondary and primary data sources for deduction and induction. The case was represented graphically and statistically, and thus the study employs both qualitative and quantitative research approaches, enabling the researcher to elicit detailed information based on the knowledge and experiences of participants. The researcher collects data using both primary and secondary sources in this research method. However, respondents are drawn from within Fan Milk Plc, with a particular emphasis on those involved in the procurement of raw materials required for the manufacture of Fan Milk products, as well as those involved in the distribution of these products to final consumers. As a result, the researcher utilized members of this company's staff due to their understanding of the subject of study, their knowledge, and their experience in the research to assist in achieving the study's objective. Against this backdrop, the data gathered will be analyzed, presented for proper comprehension of the outcome, and recommendations will be made in accordance with the study's stated objectives.

Research results and discussion

This part of this paper will present the outcomes of the questionnaire survey conducted and distributed to a random sample of Fan Milk plc employees as part of this research. To accomplish this, the study mainly depends on respondents' experiences to acquire insight into the study's research topics. Additionally, vital information regarding the company's logistics and supply chain process was gleaned from analysing respondents' experiences. There were 150 respondents approached for this research, 9 of the respondents were later selected to further be involved in a semi-structured interview that makes up the qualitative survey. In respect to this development, a strategic proposal for the logistic and supply chain management improvement by strategically proposing possible solutions. A conclusion and set of recommendations were developed at the conclusion of the study.

Against this backdrop A total of 150 questionnaires were administered, and each one was returned in its entirety. As a result, the study relied on the returned questionnaires. The analysis was conducted using descriptive analysis and data are presented in tables and graphical illustrations. This was followed by a PESTLE and SWOT analysis to investigate the external factors affecting the logistics and supply chain management of Fan Milk Plc. The final part of the study contains summary of the findings, conclusion, and recommendations.

In this section, the respondents' demographic was analyzed using descriptive analysis. The profile analyzed includes gender, age, educational level, years of experience.

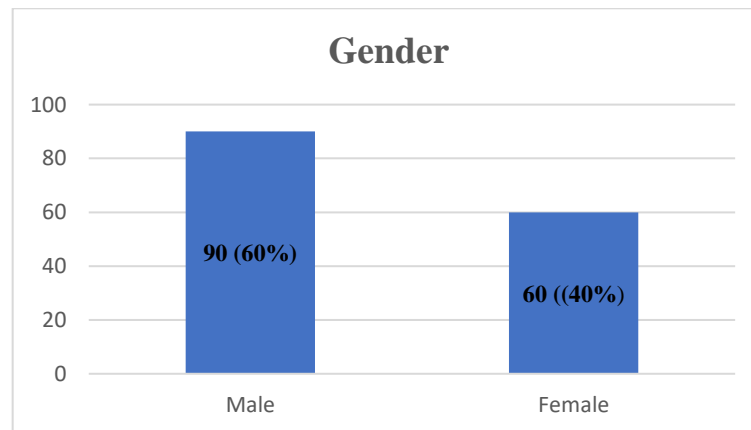


Fig 1: Analysis of gender of respondents
Source: Author

Fig. 1 above shows the gender of respondents that took part in survey. Findings reveals that 90 were male resulting to 60% while 60 participants were female resulting to 40%. This implies that majority of the workforce male.

Fig 2 shows the age of respondents that took part in the survey. Findings reveals that 35 participants were between the age 21-25 years resulting to 23.3%; 19 participants were between the age of 26-30 years resulting to 12.6%; 40 participants were between the age of 31-35 years resulting to 60% of the total number of respondents while 36 participants were within the ages of 36 and above resulting to 24% of the total respondents. This implies that majority of the workforce of Fan Milk Plc are between young adult to middle-age group.

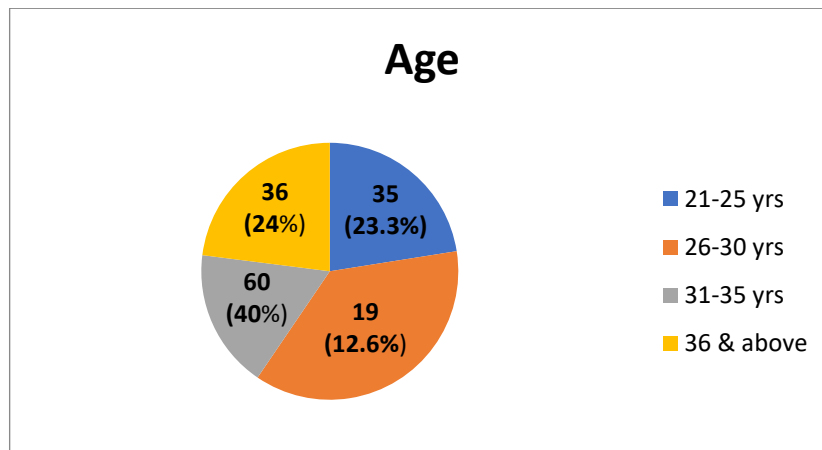


Fig 2: Analysis of the age of respondents
Source: Author

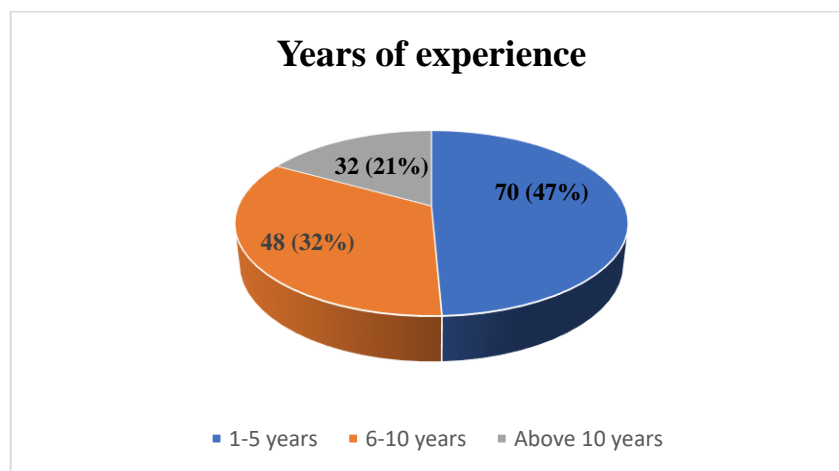


Fig. 3: Analysis of years of experience of respondents
Source: Author

Fig. 3 shows the number years of work experience of employees in Fan Milk Plc that took part in the survey. Findings indicates that 70 participants resulting to 47% has worked for 1-5 years, 48 participants resulting to 32% has worked for 6-10 years and 32 participant resulting to 21% has worked above 10 years of the total number of employees. Data also reveals that a good number of the employees have worked a long time and are well knowledgeable about the operations of the company.

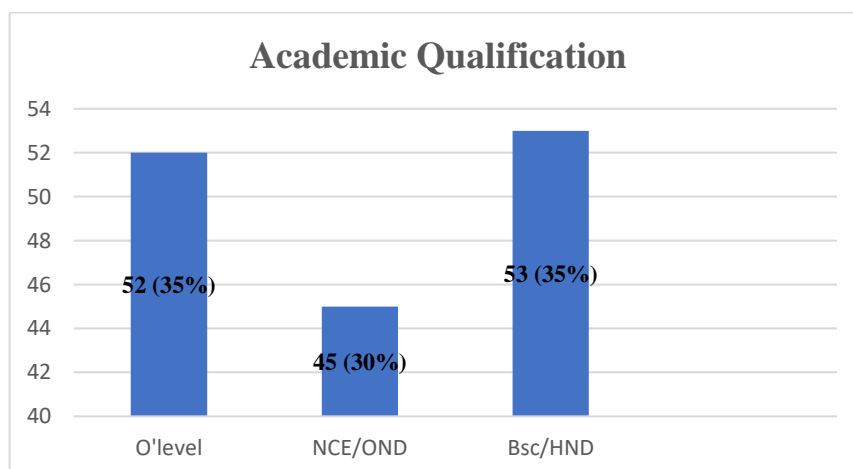


Fig. 4: Academic Qualification of Respondents
Source: Author, 2022

Fig. 4 above shows the level of education of respondents shows 52 participants with O'level resulting to 35% , 45 participants with NCE/OND resulting to 30%, and 53 participants with Bsc/HND resulting to 35%. This shows that none of the respondents were with Masters degree of the total number of respondents. The level of education of employees are

very important because its shows the extent of competencies and skills needed to handle job tasks effectively which in turn helps to improve service delivery quality and overall company performance.

Assessment of Logistics and Supply chain Management in Fan Milk Plc

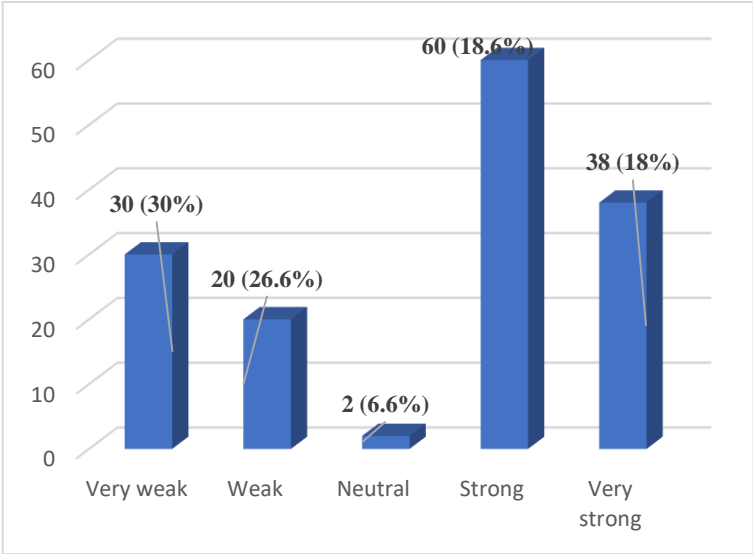


Fig 5: Analysis of the rate of performance of logistics and supply chain management
Source: Author

Fig. 5 above shows the analysis of the performance of logistics and supply chain management of Fan Milk Plc. 48 participants said the current performance of logistics and supply chain in Fan Milk Plc is Ver weak, resulting to 30% , 40 participants said it is weak resulting to 26.6%, 10 participants chose to be neutral resulting to 6.6%, 28 participants said it is strong resulting to 18.6%, while 27 participants said it is very strong resulting to 18% of the total respondents. This is an indication that the current performance of Fan Milk Plc logistics and supply chain process is weak.

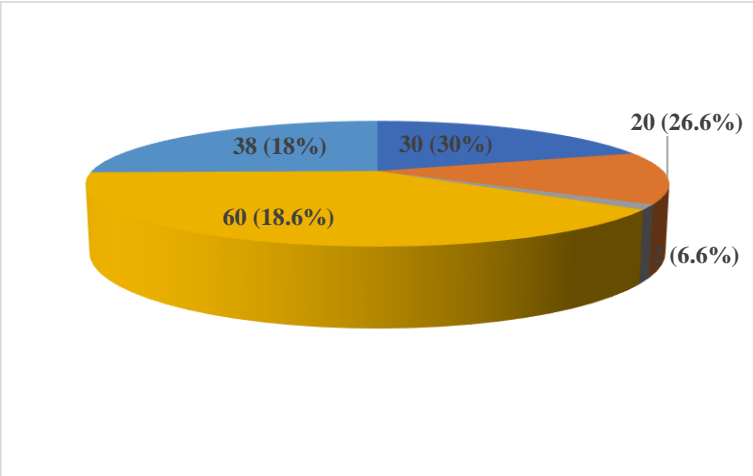


Fig 6: Analysis on the logistics and supply chain for information sharing between Fan Milk Plc and customers
Source: Author

Fig. 6 above shows the analysis of the flow of information between Fan Milk Plc and the customers. 48 participants said the share of information is very weak, resulting to 30% , 40 participants said it is weak resulting to 26.6%, 10 participants chose to be neutral resulting to 6.6%, 28 participants said it is strong resulting to 18.6%, while 27 participants

said it is very strong resulting to 18% of the total respondents. This is an indication that the flow of information between Fan Milk Plc and the customers is weak.

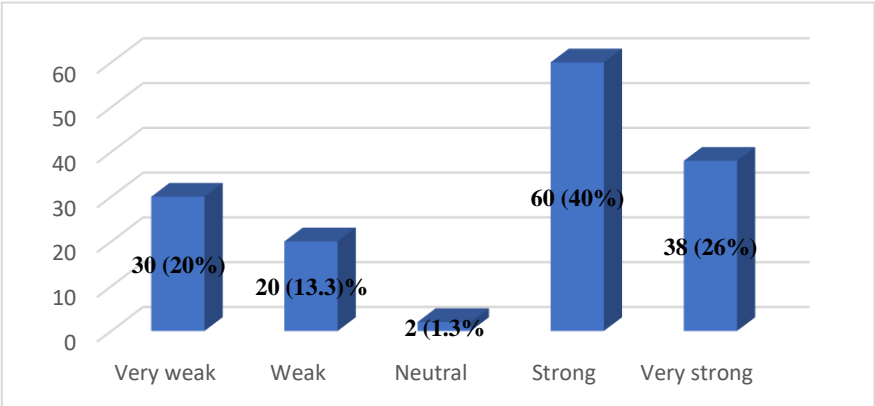


Fig. 7: Analysis on transportation of products across the country
Source: Author

Fig. 7 above shows the analysis of how the products of Fan Milk Plc are been transported across the country. 30 participants said the share of information is very weak, resulting to 20% , 20 participants said it is weak resulting to 13.3%, 2 participants chose to be neutral resulting to 1.3%, 60 participants said it is strong resulting to 40%, while 38 participants said it is very strong resulting to 26% of the total respondents. This is an indication that the logistic aspect of Fan milk is functioning very well.

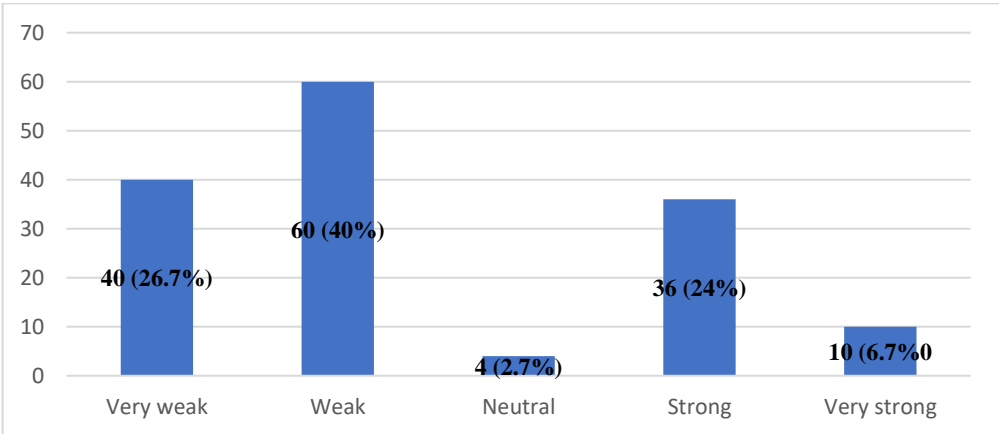


Fig. 8: Analysis on customers' satisfaction of Fan Milk Plc logistics and supply chain management
Source: Author

Fig. 8 above shows the analysis of how satisfied the customers are with the services of Fan Milk Plc. 40 participants said the share of information is very weak, resulting to 26.7% , 60 participants said it is weak resulting to 40%, 4 participants chose to be neutral resulting to 2.7%, 36 participants said it is strong resulting to 24%, while 10 participants said it is very strong resulting to 6.7% of the total respondents. This is an indication that the customers are not satisfy with the current services offered in Fan Milk Plc.

In light of this, respondents selected for the quantitative survey believe that improving the logistics and supply chain process of Fan Milk Plc can affect customers' current perceptions of the company. As a result of these findings, it appears that the possible improvement, as suggested by respondents, is to ensure there is a cordial relationship between the company and the customers. Also, there is a need to prioritize the customers need over other things.

Analysis of information performance and challenges of Logistics and supply chain management in Fan Milk Plc (Data gathered through the interview)

The logistics and supply chain management of Fan Milk Plc is the subject of this section, which contains an analysis of empirical data collected from study participants who were selected for a qualitative survey on logistics supply chain management problems and causes. The analysis's findings are organized into topics and presented in tables, along with a summary of participant replies. The tables below illustrate the outline that was used to analyse the study data after it was transcribed; the data were organized according to the outline's categories and subjects.

It is possible to confirm that respondents are familiar with the organization under inquiry based on their assessments of Quality Logistics and Supply chain management. By polling employees and other competitors about their impressions of Fan Milk Plc, you may learn how the firm is perceived in the country. As a result, the company's strength

and competitive edge in the Nigerian market can be proved. This is consistent with Cooper et al (2017).’s theory that providing clients with additional benefits or services not available through the provision of logistics services is a critical component of providing high-quality logistics and supply chain services. According to the assertions above, a quality logistics and supply chain entails an increase in the value of services supplied to users, which typically results in increased profit for users or customers.

Respondents were asked to identify what makes Fan Milk Plc’s services unique / superior to those supplied by other companies in Nigeria that provide similar services. Apart from service quality, this question was designed to elicit information on the company’s strengths and the internal and external factors that affect the company’s service performance.

Table 1. Analysis of the perception of Fan Milk Logistics and Supply chain quality

| Themes | Perception of quality Logistics and supply chain in Fan Milk Plc. |
|---|--|
| Questions | Responses |
| What quality differentiate Fan Milk products from other companies in Nigeria? | Fan Milk Plc has been in existence for many years and has grown to become the people’s favorite. Fan Milk is known for providing different flavours to meet the customers demand and have great taste. Also, we have the largest number of branches in Nigeria, highly motivated employees, high-financial investment to ensure that our products are been made available at every part of the country. Another strength of the company is its highly efficient in ensuring the delivery of products to vendors across the country. Hence, Fan Milk products are always available at every shop that sells to the final consumer. |

According to Goti et al., providing effective services to customers is riddled with a range of obstacles and barriers that hinder it from being completed successfully (2022). As a result, the successful delivery of effective services is contingent upon a number of elements that influence whether or not clients receive high-quality logistics services. Additionally, Fan Milk Plc’s quality logistics and supply chain services are frequently influenced by one or more factors, and it is critical to manage these elements appropriately to ensure the company’s quality logistics and supply chain services are continuous and effective. As a result of these results, solutions are being developed to assist these firms in improving the quality of their logistics and supply chain services (Cooper et al., 2017).

As a result of this, the firm’s theme on problems affecting quality services was established, focusing on identifying challenges both within and outside the business that affect the quality of its services and performances. This is the question for the theme-based interview: "What are the current supply chain management challenges facing Fan Milk PLC?" Internal and external factors, as well as the companies’ weaknesses and risks, would be researched and identified in response to this query.

Table 2. Analysis of current situation of logistics and supply chain management in Fan Milk Plc

| Themes | Current situation of Logistics and Supply chain management in Fan Milk Plc |
|---|---|
| Questions | Responses |
| What are the current challenges facing the Logistics and Supply chain management of Fan Milk PLC? | 1.Participants explains how the current clashes between herders and farmers in Nigeria has is affecting the acquisition of dairy milk from farmers who have been banned from engaging in open grazing in most parts of Nigeria. Also, there have been an increment in the price of the milk as a result of this clash. 2.The economic situation of Nigeria has led to an increment in the price of commodities in the country. For instance, there is currently plans by the federal government to increase the price of fuel from 165 naira/liter to 200 naira/liter. 3.Lack of constant electricity is also affecting the supply chain process because the products must be freezed before it can be sold out to customers. 4.Also, there is the issue of poor roads in Nigeria. These roads are slowing down effective delivery of the products to the whole sales customers and final consumers. |

The Impact of the current situation of logistics and supply chain management in Fan Milk Plc became an important theme to be analysed. Although, logistics and supply chain are just a department but its activities have a great impact on the entire operation of the company. To this effect, it becomes important to investigate the effect of the several challenges faced in the supply chain process on the company.

Table 3: Analysis of the impact of the current situation of Logistics and Supply chain management in Fan Milk Plc on its growth

| Themes | Analysis of the impact of the current situation of Logistics and Supply chain management in Fan Milk Plc on its growth | |
|--|--|--|
| Questions | Responses | |
| How has the problem encountered in the supply chain process affect the growth of Fan Milk Plc? | Responses of the respondents shows that the problem encountered has affected the price of the company’s product as that is the only way the company could remain in business. However, this increment in the price of commodities as resulted to the following: <ol style="list-style-type: none"> 1. Decline in demands of company’s products 2. Low yield in income realized 3. Instability in the local and International market demand and price 4. Weak information on the customers’ demands | |

The Improving the Quality of Logistics and Supply Chain Services program seeks to identify ways for overcoming historical impediments to the delivery of high-quality services. To control the quality of supply chain services they provide on a consistent basis, organizations must, according to Goti et al (2022), assure good operational planning and continuous measurement of the quality of services provided. The interview question, "What are some potential changes that Fan Milk Plc could make to their supply chain management process?" was based on this theme. This question will assist in identifying ideas and innovations for resolving the previously stated issue, as well as opportunities and internal and external factors that may have a good effect on Fan Milk Plc's supply chain management quality, as well as the previously stated issue.

Table 4. Analysis of Suggested remedial procedures

| Themes | Suggested remedial procedures | |
|---|---|--|
| Questions | Responses | |
| In your opinion, what are the possible ways to improve the supply chain management process in Fan Milk Plc? | <ol style="list-style-type: none"> 1. Investment on local herders that will rear cattle that provide the company with raw materials for its products. 2. Effective policies to enhance easy and cheap acquisition of raw materials 3. Acquisition of data on logistics and supply chain management supply to ascertain challenges and right strategies to tackling the problems of logistics and supply chain management in Fan Milk Plc 4. Seek customers’ opinions about possible strategies for customers’ satisfaction 5. Creating an online platform for advertisement to meet with prospective suppliers of raw materials. 6. Investment in other source of power to minimize reliance on electricity | |

Conclusions

1.The findings revealed the importance of effective logistics and supply chain management to the success of any given enterprise in Nigeria. to enhance the process of order and delivery of customers’ orders.

2.The researchers discovered that as a result of the farmers and herders clashes in Nigeria, an expensive logistics and supply chain process developed, which had a significant impact on product prices; they also discovered that insufficient and poor infrastructure, such as good roads and electricity, had a negative impact on product prices. Additionally, ineffective communication between the company and its clients has aided in the persistence of these issues.

3.Finally, this study proposes reorganizing the company's connection with its customers in order to accommodate their ideas and concerns, to improve customer service, and, most significantly, to seek alternate methods of getting raw materials for the product's manufacture.

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