



Evaluating the Impact of Logistics on Customer Satisfaction in the Nigerian Retail Industry

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ABSTRACT: The retail industry in Nigeria has seen significant growth in recent years, with an increasing number of players entering the market and an increasing demand from consumers for convenience and efficient service. However, the industry faces significant challenges in terms of logistics, including poor infrastructure, inadequate transport networks, and inefficient delivery systems. These challenges have a direct impact on customer satisfaction, with consumers reporting delays in delivery, damaged goods, and missing items. The objectives of this research are as follows: To identify the key challenges facing logistics in the Nigerian retail industry.; To assess the impact of these challenges on customer satisfaction; To propose solutions to address these challenges and improve customer satisfaction. The methodology for this research will include a literature review to explore the existing research on logistics, retail, and customer satisfaction. Data collection was done through surveys and interviews, using both quantitative and qualitative methods. This study is significant in addressing environmental problems in the Nigerian retail industry because logistics and transportation are major sources of greenhouse gas emissions and other pollutants. Inefficient logistics and transportation systems can result in increased vehicle miles traveled, more fuel consumption, and higher emissions. By identifying the challenges facing logistics in the retail industry and proposing solutions to address them. The findings provided recommendations for the retail industry and policy makers to improve the sustainability and efficiency of logistics in the country.

KEY WORDS: Customer, Growth, Logistics, Retail, Satisfaction

INTRODUCTION

As the business environment is uncertain nowadays, and it is very hard to be constant at success, so the business must respond to the uncertainty and meet the customer needs as they are changing day by day (Liu and Song, 2023; Sparks, L. 2023.; Lin et al., 2023). The retail industry in Nigeria has seen significant growth in recent years, with an increasing number of players entering the market and an increasing demand from consumers for convenience and efficient service. Since the beginning of the "customer service revolution" almost 25 years ago, business research has focused on customers, especially customer satisfaction. Business consultants, corporations, and operational management have all worked together to identify the characteristics of organizations that consistently please their customers, develop tools that monitor customer satisfaction, and build continuous quality improvement systems that respond to consumer feedback (Ghoumrassi and Tigu, 2017). As the present business environment is more intensely competitive, the pressure is not only on the differentiation in the product and service but also on the factors that reduce the price as well. According to Gil-Saura et al. (2010), when it comes to the success and growth of a retail store or any business relating to the retail sector, then the role of logistics is very important as it plays a very important role. Novack et al. defined logistics as an activity that involves managing facilities, transportation, meeting the third party's needs, and information within a company. Saura et al. affirmed that logistics that provide the best quality to customers would offer more significant customer satisfaction and loyalty (as cited in Restuputri et al., 2021). Customer satisfaction is a crucial concept in modern marketing thought and practice, emphasizing delivering satisfaction to customers and obtaining profits in return (Yi and Natarajan, 2018). In most developed countries, there has been research done on the logistics and the company performance and also environmental effects, which included different aspects of logistics, including the costs, warehousing, and outsourcing of the logistics operations and their effect on the company performance, and the result that was concluded from the research is that although sustainable logistics operations are difficult to obtain, if they are properly implemented, including the environmental effect as well, then the company and the country can be sustainable in different ways, like economic, social, and environmental. Abbasi Noman Muhammad et al., 2013.

Statement Problem

Logistics is responsible for the planning, then implementing, and then controlling the efficient and effective flow and storage of goods and services in any supply chain. Along with the goods and services, the flow of information from the origin to the flow of

consumption is also included. Consumers always demand goods and services in time and, most importantly, in a cost-effective way. This is always an important question in the retail sector. Retail stores are always in need of smooth flow of goods, in time, and availability of the inventory, which means that logistics plays a very vital role, like what will be the route and medium through which the goods can reach in the most cost-effective way and in time. If there is any delay in the goods reaching the store or the cost increases, then the customer will be dissatisfied and will switch to the competitor. And as the main objective of every organization is maximizing the profitability, along with the profitability, the performance of the organization should also be at its best so that the customer can be satisfied, who's satisfaction will result in the profitability of the organization. Studies are done to explain the impact of logistics on the customer satisfaction of the firm in the retail sector of the study areas. There is some research done, but some of the variables are missing from that research as transportation was not incorporated. So, this study is a theoretical contribution.

And keeping everything timely and available is exceedingly difficult for the retailer. So, this study is going to address the impact of logistics performance on the customer satisfaction in the retail sector of the twin cities Lagos and Ibadan due to the large population and the demand for retail goods by taking into consideration the four most important factors: inventory, lead time, transportation, and logistics management. The inadequate control on the management of the logistics, including factors like inventory, lead time, transportation, and logistics management, can be the reason for poor quality services to the consumer, which will dissatisfy the consumer, and the profitability of the organization will be affected highly. The objectives of this research are as follows: to identify the key challenges facing planning in the Nigerian retail industry.; to assess the impact of these challenges on customer satisfaction; and to propose solutions to address these challenges and improve customer satisfaction.

Research Significance

Profitability of the business, and hence it is quite evident that the profitability of the business is dependent on the satisfaction of the customer, as if the customer will be satisfied, then it is quite evident that the customer will visit more, and hence more sales will result in more profitability. Overall, this organization plays an especially key role, and this study will analyze the impact of logistics management on customer satisfaction in the retail industry in the twin cities of Lagos and Ibadan. This study will also help in the academic realm and will assist them in getting a pool of knowledge about the impact of logistics on customer satisfaction. The retail sector can also benefit from the study, as the study will help them get substantial findings on the impact of logistics on customer satisfaction. Other companies, especially in the service industry, will be able to understand the significance of logistics in improving the level of customer satisfaction. Supply chain practitioners will benefit from this study since it studies supply chain management in the service sector.

LITERATURE REVIEW

Customer Satisfaction

The satisfaction of customers the number of customers an organization has in many terms, like the size of the customer's pool, the quality of them, and finally, the loyalty they have to the organization. Now customer satisfaction can be measured based on his loyalty and repurchase from the organization, and these are among many other ways that an organization applies to serve its customer through the information system and the alliance of the customer. Olaghere et al. (2023). Satisfaction is a reference to the product quality along with the services and the relation between the price and performance, and along with all these, it also is when an organization is right on top of the expectations of the customers and going beyond those expectations. There are certain terms by which an organization can recognize customer satisfaction, which can be the time taken for the delivery and according to the specification of the customers, (Liu and Song, 2023; Lin et al., 2023) According to Navarro and Bacatan (2023), it is especially important before the purchase of the product whether the customer is satisfied or not. A study conducted by Navarro and Bacatan (2023). reported that any organization can be consistent in satisfying its customers, and customers will be retained with the organization, which will result in more profitability only if there are more loyal customers (Gunasekar et al., 2023; Yaboh et al., 2023). And to make this happen, organizations are working harder than ever, as there is more competition, to satisfy their customers with their loyalty, which will resultantly increase the number of sales and profitability as well. Whenever the customer's perception about any brand is good, then it is an obvious fact that he would always want to avail himself of the brand, because that brand has made its image and perception in the mind of the customer, and he would always go for it.

As per research conducted by Keshavjee and Khalaf-Newsome (2023)., the selection of brand by customer will depend on the customer upon the perception and satisfaction level given by that brand by his prior experience with the brand, and if the experience is good, he will always go for that brand. As customer satisfaction has a direct influence on the sales of the customer and it plays an especially vital role in businesses, researchers are emphasizing this a lot in their research that how the customers can be more satisfied by the business. And as this issue of satisfying the most important stakeholder of the business, which is the customer, who is also the most unpredictable and is one of the stakeholders of the business due to which the operations run in business and the business operates due to it and satisfaction changes according to the values and behaviors of the individuals, this area is of main concern and research. As the environment is changing day by day and the competition increases in the environment, organizations must cater to all these changes timely, studied by Zhang and Zhang (2023).

Inventory

The true essence of management of inventory is to argue that the operations of the business must ensure seamless flow of goods, products, and services. Demizu et al. (2023). So, if we look at this, it can be easily understood that inventory is a broader term. There are a lot of things in inventory, such as the total quantity of goods available in the stock of the company. Now this stock contains a large amount of goods and materials, including office supplies like stationery, plants, machinery, and many more. Stephen and Gupata (2016) A study by Sterman and Dogan (2015) explains that as the suppliers are given orders, they have to fulfill the orders, but if they fail to do so, the delivery will take longer time, and the service to the customers becomes more and more poor day by day if this keeps on happening. So, for the understanding of the replenishment scheme of the retail sector, a periodic review system is applied. These systems are designed for the order placement of varied sizes periodically, which automatically takes the inventory levels to the required level, as stated by Neves et al. (2023). In his study, the best example of this can be in a retail store in which the shelves are replenished periodically, say at the end of the day. As this is periodical and continuous replenishment on a regular basis, this best suit the low-cost stock, but with the low cost, the demand is high, which results in low inventory management costs. Retailers, for this reason, will have to maintain an optimal level of inventory so that they can meet customer demand, and the service level should be at its best. Products that are in high demand should be replenished. According to Eltantawy et al. (2015), if inventory, safety stock at buyers' facility needs to be reduced and development reliable forecasts along with decreasing the lead time for the products, if all this is needed then the supply chain in any organization or retail sector should be coordinated.

Time

In the context of supply chain, lead time is defined as, whenever a customer places an order for any product or service, then from the time the customer orders to the time the customer receives the product or services is called lead time, if it is not a final product or an intermediary (say, work in progress), so here lead time is the time taken to actually manufacture the order without any inventory other than raw material. If it is studied from the point of view of manufacturing, then it is amazingly simple that the definition will remain the same, but it will also incorporate time taken by the supplier to ship the raw material, stated by Choi et al. (2023). Lead time is the time that is spent between ordering and receiving the order. The time can be different for assorted products as it depends on the nature of the product, as products can be made to order, or they can readily be available for the shelf. Oladimeji (2023). There are a number of factors on which lead time matters, like SCM, the planning, the logistics management, and the remoteness from the customer to the supplier.

According to Idrees et al. (2023), if the lead time is high and the substitutes are also high, then substantial amounts of products are needed. That also requires the level of safety stock to increase, due to which the cycle time increases, and the forecasting becomes less and less accurate. The difference in lead time can be incurred for items that are on the purchased list and those that are manufactured in-house. According to Olaghere et al. (2023), one of the factors that is the reason for longer lead time is the machine breakdown, as the machine repair will take time and result in longer lead time. The most crucial factor that affects lead time variability is planning. As Alp and John (2003) stated, when inventory is kept at different points in the supply chain, then it will work as reducing the risk factor when there is variation in demand. So, all these developments require the mode of transport to be changed, as this will also affect the lead time. And the supply chain incorporates the transporters, retailers, and the customer as well. And as the supply chain gets increasingly difficult because of demand fluctuation, which results in the variability of the time taken for the processing. When queue control and its management are done effectively in the organization, then uncertainty also reduces.

Logistics Management

Logistics encompasses the physical flow and movement of goods, information, and finances, which has been widely recognized to be a key determinant of a best-performing supply chain in organizations (Touboulicand Walker, 2015). On the other hand, logistics management describes approaches that firms leverage to gain the logistical objectives, including reduction in costs, timely delivery, increased speed in transportation, as well as optimizing the use of resources in the firm (Mejías et al., Pardo, 2016). Logistics management practices are a set of activities that influence supply chain and operational performance in organizations (Dias and Braga-Junior, 2016). Logistics management practices refer to the firm's ability to plan and organize various undertakings that help in management of the flow of resources for better operational performance (Khor, Udin, Ramayah, and Hazen, 2016).

THEORETICAL FRAMEWORK

The conceptual framework that will be addressing the issues in the research will focus on the effect of efficient logistics in the retail sector. There are always two main variables, including the dependent variable, which will be affected by the other variable called the independent variable (Figure 1). Independent variable that is always manipulated by the research to investigate whether it convectively brings changes to another variable. This other variable, which is measured and predicted to be dependent upon the independent variables, here the inventory, lead time, transportation, and most importantly, logistics management, is measured as IV, which consecutively brings changes on customer satisfaction in retail stores in either way as the comfort zone of the satisfied or dissatisfied customer.

RESEARCH METHODOLOGY

The design of this study will be, with minimum interference, a cross-sectional descriptive survey. The reason for choosing this type of survey is that it will be the most appropriate for this research and its questions. This survey, which is known as a cross-sectional survey, will enable the researchers to examine the effects of logistics on customer satisfaction in the retail sector of the twin cities of Lagos and Ibadan. And this study will also offer the opportunity for a logical structure of the inquiry into the problem of the study. This is a descriptive study along with objective testing on the impact of logistics on customer satisfaction in the retail sector of the twin cities, and the basic research will be.

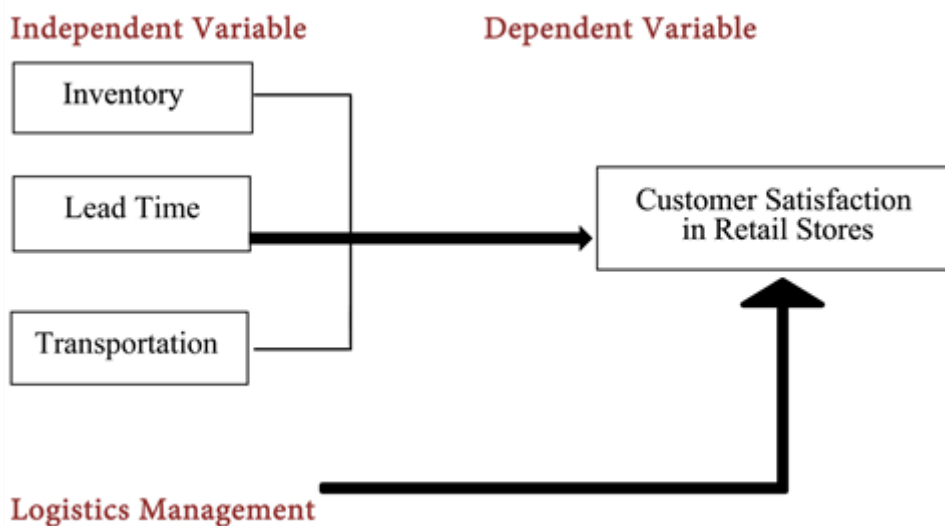


Figure 1. Theoretical framework.

revolving around the major factors like lead time, transport management, logistics, and inventory, which will improve customer satisfaction of the retail store. The research is based on two types of data, secondary and primary data. The secondary data are the literature review and the theory support, and the data obtained from the survey through the questionnaire is known to be the primary data for this study. The current study is focused on logistics, which includes the following factors: transportation, lead time, inventory, and logistics. The value of Cronbach’s alpha is the factor in every research project that proves the reliability among the research questionnaire items, and the minimum acceptable value of Cronbach’s alpha is 0.7. The factors of logistics were measured as follows:

RESULTS

In total, there were 30 questionnaires, which were distributed to supply chain managers or their equivalents from the online retail firms in Lagos State, Nigeria. Out of the 30 questionnaires, 23 were dully filled up and returned to the researcher. This accounted for a 77% response rate, which was in line with Sekaran and Bougie (2016), who said that sufficient response rates should be at least 70%. Table 1 below gives the response rate.

Relationship between Logistics Management Practices with Flexibility as Measure of Performance of operations

The investigation checked the relationship between logistics management practices with flexibility as a measure of operational performance. The research made use of multiple regression on performance operation measures as indicated in the table below:

Table 1: Coefficients on Flexibility

Model	Unstandardized Coefficients		Standardized Coefficients	t (Value)	Sig. (P Value)
	B	Std. Error	Beta		
(Constant)	1.203	0.932		1.291	0.243
Order ProcessingManagement (X1)	0.125	0.124	0.106	1.008	0.363
Transportation Practices(X2)	0.178	0.089	0.227	2.000	0.037
Information flow Practices (X3)	0.461	0.124	0.473	3.718	0.001
Warehousing Practices (X4)	0.381	0.093	0.465	4.097	0.000
Packaging Practices(X5)	0.137	0.112	0.132	1.223	0.253
Research Data (2024)					

- a. **Dependent variable: Flexibility**
- b. **Predictor: Order Processing management, transportation practices, information flowpractices, Warehousing Practices, Packaging Practices**

$$Y=1.203+0.125X1+0.178X2+0.461X3+0.381X4+0.137X5$$

From the table 1, the information there shows that order Processing, management and flexibility are insignificantly and positively correlated. (t=1.291, p=0.243). This shows that an escalation in the level of acceptance of logistics management by one entity results in an associated increase in the elasticity offered by 0.125. Moreover, Order management of processing had p=0.363 value showing that it is statistically insignificant at 0.05 critical value as it is greater than 0.05. Transportation Practices and flexibility are statistically significant and positively related (t=2.000, p=0.037) that shows an increase in the execution of logistics management practices by one unit, results in a related gain in flexibility by 0.178; other factors held constant. In addition, p= 0.037 is lower than 0.05, therefore it is statistically irrelevant. Information flow Practices and flexibility are statistically and positively significant, (t=3.718, p=0.001) that shows implementation of Information flow Practices results in an advancement in the flexibility of operations by 0.461. The p-value linked to information flow practices is 0.001 showing information flow as a practice in logistics management is statistically significant because it is less than the critical p value 0.05 at 95% confidence level. Warehousing Practices and flexibility are significantly and positively correlated, (t=4.097, p=0.000) meaning that an entity increase in the implementation of warehousing practices results in a related increase in the flexibility of operations by 0.381, and the related p-value of 0.000 which is an indication that warehousing practices as a logistics Management practice is statistically significant because it is under 0.05 at 95% confidence level. Therefore, employment of warehousing practices improved flexibility of operations in the firms. Packaging Practices and flexibility are insignificantly and positively correlated, (t=1.223, p=0.253) meaning a unit increase in packaging practices brings about a related upward move in the flexibility of operations by 0.138, and the associated p-value is 0.253 which means packagingpractices as a logistics management practice is trivial as it is higher than 0.05 at 95% level of confidence.

Table 2: NOVA Table on Flexibility

Model	Sum of Squares	Df	Mean Square	F	p-value
Regression	9.0254	5	1.805080	4.7339419	.000 ^b
Residual	6.4822	17	0.3813059		
Total	15.5076	22			

Research Data (2024)

- a. **Dependent variable: Flexibility**
- b. **Predictors: Management of Order Processing, Transportation Practices, Information flowPractices, Warehousing Practices, Packaging Practices.**

The results in table 2, indicate that the general model is statistically significant as the p- value=0 is below 5%. Additionally, for α=5% numerator, df =5 and denominator df=17, criticalF value is 2.81. Since the calculated F= 4.73, this also supports the numerical significance of the concept. This result implies that the model is a suitable predictor of operational performance as measured by flexibility.

Effect of Logistic Management Practices with Cost as a Measure of Operational Performance

The second objective of this research was to define the impacts of implementation of logistic management practices on cost as an operational performance measure in online retail firms in Lagos State. The research made use of multiple regression on logistics management practices measures. The findings on cost are as specified in table 3 below:

Table 3: Cost Coefficients of Regression

Model	Unstandardized Coefficients		Standardized Coefficients	t (Value)	Sig. (P Value)
	B	Std. Error	Beta		
Constant	1.825	0.925		1.973	0.047
Order Processing Management (X1)	0.013	0.132	0.009	0.098	0.937
Transportation Practices(X2)	0.062	0.097	0.075	0.639	0.477
Information Flow	0.425	0.134	0.436	3.172	0.001

Practices(X3)					
Warehousing	0.379	0.097	0.464	3.907	0.000
Practices(X4)					
Packaging Practices(X5)	0.0456	0.217	0.043	0.210	0.699

Research Data (2024)

a. Dependent Variable: Cost

b. Predictors: Order Processing Management, Transportation Practices, Information flowPractices, Warehousing Practices, Packaging Practices

$$Y=1.825+0.013X1+0.062X2+0.425X3+0.379X4+0.0456X5$$

From table 3, this means, order management of processing and cost are positively and statistically insignificant. (t=0.098, p=0.937). This means order processing management increase by one unit, brings about related growth in the cost of products and services offered by 0.013. Order Processing Management was p=0.937 value showing that it is statistically insignificant at 0.05 critical value since it is more than 0.05. Transportation practices and cost reduction are positively and insignificantly related (t=0.639, p=0.477) meaning that an increase in the execution of transportation practices by one unit, results in a related lessening in cost by 0.062 all other factors held constant. Besides, p= 0.477 is greater than 0.05 and hence it is statistically insignificant. Information flow practices and cost are positively and statistically significant, (t=3.172, p=0.001) which shows implementation of information flow practices leads to reduction in cost of operations by 0.425. The p-value associated with information flow was 0.001 which is an indication that information flow as a logistics management practice is statistically significant since it is less than the critical p value of 0.05 at 95% confidence level. Warehousing Practices and cost are positively and statistically significant, (t=3.907, p=0.000) an indication that a unit increase in the implementation of warehousing practices results in a related reduction in cost of operations by 0.384, and the related p-value is 0.000 which is an indication that warehousing practices as a logistics management practice is statistically significant since it is below 0.05 at 95% confidence level. Hence implementation of logistics management practice has reduced the cost of operations in online retail firms in Lagos State, Nigeria. Packaging Practices and cost are positively, insignificantly related, (t=0.210, p=0.699) an indication that a unit increase in the implementation of packaging practices results in a related reduction in cost of operations by 0.046, and the related p-value is 0.699 which is an indication that packaging as a logistics management practice is insignificant since it is higher than 0.05 at 95% confidence level.

Table 4: Model Summary on Cost

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.771 ^a	0.594	0.533	0.650

Research Data (2024)

a. Dependent Variable: Cost

b. Predictors: Order Processing Management, Transportation Practices, Information flow Practices, Warehousing Practices, Packaging Practices

The findings in table 4, indicates a correlation coefficient value of 0.771, R squared value is 59.4% meaning that 59.4% of the variation in cost is explained by the variation in the independent variables: Order Processing Management, Transportation Practices, Information flow Practices, Warehousing Practices and Packaging Practices. This is a satisfactory prediction model. Unexplained variations are 42.4%. This is due to variables not included in the model and pure chance factors.

Table 5: ANOVA Table on Cost

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	10.524	5	2.1048	4.9747105	.000 ^b
Residual	7.193	17	0.4231		
Total	17.717	22			

Research Data (2024)

a. Dependent Variable: Cost

b. Predictors: Order Processing Management, Transportation Practices, Information flow Practices, Warehousing Practices, Packaging Practices

The results in table 5, indicate that the overall model is statistically significant since the p- value=0 is less than 5%. Further for $\alpha=5\%$ numerator, $df=5$ and denominator $df=17$, critical F value is 2.81. Since the calculated $F=4.97$, this also supports the statistical significance of the model. This result implies that the model is a suitable predictor of operational performance as measured by Cost.

Effect of Logistics Management Practices with timely Delivery as an Operational Performance measure

The objective that was second in the research was to define the effect of execution of logisticsmanagement practices on timely delivery as a measure of operational performance in online retail firms in Lagos State. The research employed multiple regression on all the measures ofoperational performance. The results on timely delivery are as shown in the table 6 below:

	Coefficients		Coefficients (Value)		(P)
	B	Std. Error	Beta	(Value)	Value)
(Constant)	3.349	1.341		2.498	0.017
Order Processing Management (X1)	0.548	0.184	0.004	2.978	0.004
Transportation Practices (X2)	0.057	0.417	0.064	0.137	0.65
Information Flow Practices (X3)	0.027	0.231	0.018	0.117	0.894
Warehousing Practices (X4)	0.384	0.184	0.303	2.087	0.042
Packaging Practices (X5)	0.393	0.181	0.596	2.171	0.001

Source: Research Data (2024).

a. Dependent Variable: Timely Delivery

b. Predictors: Order Processing Management, Transportation Practices, Information flowPractices, Warehousing Practices, Packaging Practices

$$Y=3.349+0.0548X1+0.57X2+0.027X3+0.384X4+0.393X5$$

From table 6, it can be seen; Order Processing Management and timely delivery are positive and statistically significant. ($t=4.869$, $p=0.004$). This shows that implementation of order processing management increase by one unit, marks an associated increase in the timely delivery of offered products and services by 0.548. Moreover, order processing management had $p=0.004$ value, an indication that it is statistically significant at 0.05 critical value since it is less than 0.05. Transportation remains and timely delivery are insignificantly and positively correlated ($t=0.137$, $p=0.650$ meaning an increase in the execution of Transportation Practices by one unit, results in a related increase in reliability by 0.057 all other factors remaining constant. besides, $p=0.650$ is greater than 0.05 and hence it is statically insignificant. Information flow practices and timely delivery are positively and insignificantly related, ($t=0.117$, $p=0.894$) meaning implementation of information flow practices leads to an improvement of timely delivery of goods and services by 0.027. The p-value associated with information flow practices was 0.894 which is an indication that information flow as a logistic management practice is statistically insignificant because it is more than the critical p value of 0.05 at 95% confidence level.

Warehousing practices and timely delivery are significantly and positively correlated, ($t=2.087$, $p=0.042$) meaning a unit increase in the execution of warehousing practices causes an associated increase in timely delivery of goods and services by 0.384, and the related p-value is 0.042 meaning Warehousing practices as a logistics management practice is significant as it is below 0.05 at 95% confidence level. Therefore, execution of logistics management has improved the timely delivery of retail firms in two study areas. Packaging practices and timely delivery are positively and statistically significant, ($t=2.171$, $p=0.001$) meaning a unit increase in the implementation of packaging practices results in a related increase in timely delivery of goods and services by 0.393 and the related p-value is 0.001 meaning packaging practices as a logistics management practice is significant since it is lower than 0.05 at 95% confidence level.

Table 7: ANOVA Table on Timely Delivery

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	9.184	5	1.8368	5.057269	.000 ^b
Residual	6.174	17	0.3632		
Total	15.358	22			

Source: Research Data (2024)

a. Dependent Variable: Timely delivery

b. Predictors: Order Processing Management, Transportation Practices, Information flow Practices, Warehousing Practices, Packaging Practices

The results in table 7, indicate that the overall model is statistically significant since the p- value=0 is less than 5%. Further for $\alpha=5\%$ numerator, $df=5$ and denominator $df=17$, critical F value is 2.81. Since the calculated $F= 5.057$, this also supports the significance statistic of the model. This result implies the concept is a suitable predictor of operational performance as measured by timely delivery.

CONCLUSION

In the study there were two objectives were developed and after applying all statistical analysis of correlation and regression and after checking the reliability of the measuring instrument used, the sample size was of 215, and the study was conducted in the twin cities. And the results have supported the objectives formulated. As Objective 1 (Obj1) was accepted that there is a positive relationship between inventory and customer satisfaction, and it in conformity with the previous research, as in the study conducted by Ogonu Gibson Chitru et al. (2016), investigated that inventory management has a strong positive relation with the satisfaction of the customers in the retail supermarket of study. Objective 2 (Obj2), which was the positive relationship between the lead time and customer satisfaction was also accepted, as from the previous studies is in conformity of this according to the study conducted by Job Louis Mfwaya (2013) to examine the relationship and effect of lead time management on the customer satisfaction, and the results from that study also shows a positive relationship between both the lead time and customer satisfaction. This study therefore established that with transport management provides better logistics efficiency, timely delivery, reduces operation costs and promotes services quality on firm hence bringing customer satisfaction when it comes to inventory, then for the customer satisfaction there should always be inventory available in the store so that the customer should know that he always can have all his requirements fulfilled in the same store, and which will make up his mind to revisit the retail store again. Customer will also be satisfied if there is less lead time in delivering the products and if the lead time is less than the store will receive its inventory in time, and making all the products available for the customer in time which can influence customers in a very positive way, resulting in their satisfaction. (Ghoumrassi and Tigu, 2017).

Poor service and providers cause customer dissatisfaction by not providing new service improvements but still using the same model as before. Service providers feel that the services used are acceptable to customers but no longer meet customer expectations because of increasing market competition and changing customer tastes (Rust and Zahorik, as cited in Restuputri, Indriani and Masudin, 2021). Several studies (Anderson, Fornell and Lehmann, 1994; Ittner and Larcker, 1996; and Fornell et al., 2006; Oliva et al., 1992; as cited in Ellinger et al., 2012, p.251) showed that firms with higher levels of customer satisfaction generate higher returns on investment, productivity, market value-added, shareholder value, and stock market performance. Furthermore, they affirmed that increasing and maintaining elevated levels of customer satisfaction enhances customer loyalty and serves as a safeguard against increasing price competition and the commoditization of products. As supply chain management competency enables firms to create value by better meeting customer service expectations, customer satisfaction increases (Ellinger et al., 2012). Hallowell affirmed that loyalty from customers would create increased profit by increasing revenue, lowering costs to attract customer attention, and decreasing price sensitivity, while Gronholdt et al. conducted a study that increased market share can reduce customer satisfaction. It is more difficult to satisfy customers who consist of many segments rather than those with small ones (as cited in Restuputri, Indriani and Masudin, 2021).

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