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Customer Proximity, Global Positioning Systems (GPS) and Return on Investment for Logistics Transactional Companies in Nigeria

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ABSTRACT

The study is an expository study of the construct of customers' proximity, global positioning systems and return on investment for logistic transactional companies in Nigeria. The study tends to look at how customers' proximity benefits business; it went on to briefly relate the role that global positioning systems (GPS) have on customers' proximity and how revenue generation is affected with such linkage with due consideration to customers retention, customers service experience, sales management and revenue generation. The accelerator theory of investment was adopted to help in explaining the issues of return on investment, by linking customer proximity and global positioning systems (GPS). From the review of related literature we concluded that the proximity of customers can be realized with ease if Global positioning systems (GPS) is introduced into the logistic companies' operations and as such, revenue will grow in the right direction. Based on the conclusion of the study we recommend that logistic companies in Nigeria should introduce the use of GPS in relating with their customers. The organization should create a platform that can bring their customers into close contact as this will not only ensure their ability to relate with their customers but will also ensure that customers to customers' relationship are foster. Furthermore, the study recommend that that logistic companies must as a matter of urgency gets the data of their actual customers and create a medium that can ensure effective collaboration among them, by ensuring that the image that the customers sells to the public represent a true identity of the organization at large. As this will bring in potential customers to the organization which will in turn generate more revenue for the organization.

KEYWORDS: *Customer Proximity, Global Positioning Systems, Return on Investment, Sale Management, Revenue Generation, Customer Retention*

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1. INTRODUCTION

In this new global era of Covid-19, logistics companies and other organizations are clamoring to have or get their products to their target market or customers. As a result, most logistics companies are proposing the adoption of Global Positioning System (GPS) as a way to getting close or proximate to their customers. This is because if organization is not able to engage, advocate and check the spending attitude of its customers; return on investment in the form of revenue generated, amount of products sold, numbers of customers acquired and customer retention will be greatly affected. And this could in turn slow down the organization and subsequently affect the goals and objectives of the organization (Omar *et al.,* 2012).

As a basis for the survival and development of logistics transactional companies in Nigeria, customer proximity has great impact on the return on investment of such enterprises (Lee & Lee, 2011 cited in Takeno, Lucato, Vanalle&Júnior (2015). However, it is not uncommon for companies to have poor customer engagement due to non-adherence to proximity issue, leading to business challenges and even bankruptcy (Vanalle and Salles, 2011). In view of the importance of customer proximity on logistics transactional companies in Nigeria, a large number of scholars have studied how to determine the distance between the companies and its customers efficiently and effectively and in turn increase return on investment (ROI) (Aymard and Brito, 2009). Yet a great deal of customers' proximity is yet to be fully covered.

Customer proximity can be described as the mean distance from the firm to the customer or market place. For logistics companies to better understand the needs of their customers, discover unmet needs and bring customers into the value creation process of their organization, such organization must seek for different medium to engage customers and create alternative value propositions that will become a significant threat to other business competitions (Mescuita and Castro, 2008).

Also,Guarnieri and Hatakeyama (2010) says that customer proximity breeds engagement, not just between the firm and customers, but also between customers. A customer proximate company will create opportunities for customers to engage not just with the firm, at the point of sales, but also with each other. Customer proximate organization extends the fortress out beyond the boundaries of the firm to include customers. These firms become customer advocate and provide multiple platforms for customers to engage with them, and with each other (Pachco*et al.,* 2021).

On the other hand, investments remain the sure way for firms to be able to sustain its existence in the nearest future (Zamfir, Manea and Ionescu, 2016). Note that investments are considered resources deployed in the hope of achieving benefits during a long period of time or money or other resources expended in the hope that in the future they will bring higher amounts of money or other benefits will occur (Mieila, 2009). The objectives of an investment are multiple: increasing profit, customer satisfaction, increasing the market share (Zamfir, Manea and Ionescu, 2016). Also, to be included in the investment objectives are revenue generation, numbers of products sold, numbers of customers acquired and customer retention. By comparing profits with assets, we can appreciate the extents to which profits generate an adequate return on investment.

Despite the various opinion expressed by different scholars on the issue of customers proximity and return on investment (ROI), logistics companies in Nigeria and in other parts of the globe will not be able to achieve much without giving attention to global positioning systems (GPS). As global positioning systems (GPS) allows people or individuals to be able to locate items or object exactly anywhere in the world (Kaplan, 2011). Although, it still requires objects high in the sky to figure out where these items are and how to get to them.

Global positioning system is a navigation system that is used in land, sea, and air to determine the exact location, time and velocity irrespective of weather conditions (Tom Tom, 2015). A GPS satellite functions by transmitting signals to equipment on the ground and this ensure customers get close to their firm by being able to track the products they purchase. GPS brings firms and its customers to close proximity and in turn increase the return on investment (ROI) in most logistics companies in Nigeria. As such, GPS has become a widely deployed and useful tool for commerce, scientific use, tracking and surveillance globally. It facilitate everyday activities such as banking, mobile phone operations and even the control of power grids by allowing well synchronized hand-off switching (Abulude, Akinnusotu and Adeyemi, 2015).

In line with the above introduction, this paper will be addressing the issue of the proximity of customers to firms via the applicability of global positioning systems and its implication on revenue generation, customer retention, product sales and customers acquisition with emphasis to the extent of customer engagement, advocacy and spending. The work was sectioned into literature review parts, findings conclusion and recommendation.

2. Literature Review

The accelerator theory of investment was adopted to help in explaining the issues of return on investment, by linking customer proximity and global positioning systems (GPS). The accelerator theory of investment, in its simplest form, is based upon the notion that a particular amount of capital stock is necessary to produce a given output. Hence, for logistic companies in Nigeria to be able to get its services close to its customers, increase its customer acquired, generate more revenue and even retain its customers, the logistic companies must redirect their investment pattern to capture Global Positioning Systems (GPS); as this action will not only get them closer to their customers, but will also help the customer to even get closer to each other.

2.1. Return on Investment (ROI)

Return on investment is one of the most popular evaluation metrics (Philips & Phillips, 2006).The perspective held by the public on the issues of ROI has a clear dependency on the state of the business environment. As rough periods of business produces tougher competition of sales for the available money or dollars in circulation (AlexieBotchekarev and Peter Andru, 2011 cited inWang, Wang & Khalil, 2018). As a result, academic and business practitioners have developed interest in evaluating the methods of significance of ROI as a tool for better decision. ROI is a performance measure and to evaluate the efficiency of an investment or to compare the efficiency of a number of different investment (Investopedia, 2011). ROI can be calculated using the formula below.

$$ROI = \frac{Gain\ from\ Investment - Cost\ of\ Investment}{Cost\ of\ Investment}$$

It will be observed that ROI have been defined differently by different scholars globally; each definition pays attention to certain ROI aspects. Such definitions reflect the facts that approaches to ROI and even ROI concepts vary from company and from practitioners to practitioners; most likely every consultant has a particular variation. However, despite the diversity of the definitions the primary notion is the same (Mogollon &Raisinghani, 2003).

In specified situation, ROI variations can be used either as return on investment capital, return on total assets, return on equity, return on net worth (Andolsan, 2004). Some authors look at ROI even broader; some see it as a method of persuasive communication to senior management, a process of getting everybody's attention to the financial aspects of the decision and stimulating a rigid financial analysis. In such situation according to Kalvar (2003) actually calculating ROI numbers are of less importance compared to the process of gathering and analyzing cost and benefit data. It is along this view that we address ROI from the aspect of revenue generated, products sold, customer acquired and retained. This will further help the business world not to only look at performance from only the financial indicators alone; as it has been our common practices to view ROI from such part.

Revenue Generation

The construct of revenue generation has been defined from different perspective by different scholars. While scholars like Dixon (2000) sees revenue as "the total amount obtained from the sales of merchandise services to customers", Procter (2005) sees it as income only. Fayemi (1991) sees it as "all tolls, taxes, impress, rates, fees, duties, fine, penalties, fortunes and all other receipt of government from whatever source arising over a period either one year or six months." Flesher and Flesher (2007) define revenue as "an increase in owners' equity resulting from the performance of a service or sales of something." The definition is based on the concept of equity which may increase due to sales of goods or provision of services in other words there are two sides to revenue; something received and given.

Sales Management

On the onset, the term "sales management" refers to the direction of sales force personnel. But it has gained a significant position in today's world. Sales management means management of all marketing activities including advertising, sales promotion, marketing research, physical distribution, pricing and product merchandising. Further, it may be quoted as the socio-scientific process, involving group efforts, in the pursuit of common goals or objectives, which are predetermined. Sales management differs from other fields of management, mainly in different aspects, the selling operation of a business firm does not exist in isolation. Thus, simultaneous with the changes taking place in the business, as well as marketing-orientation, a new concept of sales management has evolved. The business is now society-oriented, on human welfare aspects. So, sales management has to work in a broader and newer environment, in co-existence with the traditional lines.

2.2. Customer proximity

Being close to the customer by creating value is part of the issues that modern business faces. This is particularly important for reasons such as "your current customers are your livelihood", while in normal times you can change customers and acquire new ones, this is now no longer or hardly possible (Wolfgang Lassl&WiebkeJunge, 2020). Unless you produce products that are urgently needed currently and gives consideration to competition intensity; consumers will be able to choose their supplier and this will affect sales and revenue. Therefore, that you increase the switching barriers for your customers; the value that you create for the customer binds and also does the emotion and personnel relationship.

It is very important to always remember that your customer's markets decide your opportunities and which in turn decides the strategies you should choose. So for logistics companies to be able to get close to its customers and further improve its return on investment such firms must always remind itself of customers by making routine reflection on what the company can do for its customers and how they can get close to them.

One should not be misled by the simplicity of the term "customer proximity." On the one hand, it is immediately understandable, but on the other hand, the proximity being referred to is the value created to customers, that is why pure management group (n.d) said that "nothing is often more mysterious and more difficult to grasp than the value one creates; one will be trying to determine the value using tools, but often these are only auxiliary constructions". In line with this, Peter Druccker (1954) recommends that "the value concepts of a company's various customers are so complex and only the customers themselves can provide information about them." He went further to say that management should not even attempt to give the answers; they should always approach the customers themselves with systematic research (peter Drucker, 1954). This support the introduction of Global Positioning Systems (GPS) in most service providing companies globally, and Nigeria logistic companies should not be left out; as this will facilitate return on investment; by increasing revenue for the organization, increase sales and ensure the retention of customers.

Customer retention

Customer proximity marketing is far ahead of just sending clients offers and promotions, this is because the information the logistic companies get from their customers is used to retarget the customer to get them to continue to do business and even eventually refers other customers. According to Matanga (2008), "customer retention is a measure of customer loyalty based on an organization's success in retaining the business of its existing customers". Hoffman and Bateson (2006) state that customer retention is one of the benefits of relationship marketing, and customer retention refers to concentrating the organization's marketing efforts toward the existing customer base. Customer retention focuses only on developing marketing strategies that cause repeat-purchasing behaviour. Hoffman and Bateson (2006) further state that in contrast to seeking new customers, organizations engage in efforts directed towards customer retention in order to satisfy existing customers. The needs of the customers are increasing and the competitiveness among the different institutions within this sector has been similarly increasing. Winning in the highly competitive logistic market means convincing customers to come through the door and also convincing them to stay. Improved efficiency and simplification of the on-boarding process makes it easier for a customer to join a logistic company (PwC, 2013).

Logistic companies' management must identify and improve upon factors that can limit customer defection. These include employee performance and professionalism, willingness to solve problems, friendliness, and level of knowledge, communication skills, and selling skills, amongst others. The company logistic is highly competitive, with banks not only competing amongst each other; but also with non-banks and other financial institutions (Boulding, Kalra, Staelin&Zeithaml, 2009). The literature is clear on the point – the longer a company retains a customer; the more profit the company generates. Therefore, a positive relationship between the logistic companies and the customer is significant since this is capable of influencing retention as the customer will experience feelings of trust and satisfaction towards the company.

Customers' service experience

The need for improving a customer's service experience should be inculcated in the hearts and minds of every employee. It is common knowledge that a happy, satisfied customer is likely to return and or tell others about the good experiences that they had when dealing with your company. Johnston and Kong (2011) state that providing a good experience is also important because it affects customer satisfaction, delivers customer loyalty, influences expectations, instills confidence, and creates emotional bonds with customers or, conversely, leads to emotional scarring. When it comes to a customer having to purchase a service, the customer would possibly select from the specific company that holds a positive sustainable record of customer experience (Howcroft, 2007). Hence, there is an urgent need to improve the service experience of the customer**.**

2.3. Global Positioning Systems (GPS)

Global Positioning Systems (GPS) have become commonplace in modern society. As it is true with any device that can record and store data, this devices helps customers to be able to store and retrieve data and in turn help to locate positions of items (Lombardi, 2003). A GPS receiver can automatically compute its latitude, longitude, and altitude using positioning data received from the satellites (Lombardi, 2003); that is why proximity target gain relevance for some decades now. As the desire to keep the customers close gain relevance in present day market, marketers have increasingly started to recognize the power of "right place, right time" and e-marketing strategies. Understanding the importance of targeting customers at critical "decision-making" moments has been linked to positive consumer response.

2.4. Customer Proximity, Global Positioning Systems (GPS) and Return on Investment

According to Wamuyu, (2017) in his study on exploring the use of global positioning system (GPS) for identifying customer location in M-commerce adoption in developing countries. M-commerce in Kenya has seen tremendous growth over the last few years due to the availability of mobile payments, mobile internet access, and expansion of mobile banking systems. A critical factor to the success of m-commerce is timely delivery of purchased items to the customers' premises. Timely delivery is highly dependent on the courier's ability to locate the buyer's physical location. To do this, the courier requires a reliable physical addressing system. However, like most developing countries, Kenya lacks a National Addressing System to provide properly registered physical identity of buildings, streets, and roads. The study explored the use of GPS in identifying customer's location as an alternative to named physical addresses. This paper describes the study design and discusses the findings concerning the use of GPS tracking application among six retailers and thirty customers. The study reveals that geolocation can substitute physical addresses in m-commerce home deliveries.

Phir&Banda (2019) Investigating Mobile Money Usage Patterns in Zambia, a case of mobile network operator system. Mobile money which refers to the use of mobile phones to perform financial and banking functions has increasingly become popular in the world today. Not only has mobile money brought advantages of convenience, safe transactions, 24 hours access to its users, mobile money has also created a great revenue base for service providers. Zambia was one of the first countries in Africa where mobile money was launched. As early as 2001, various Zambian businesses including Mobile Network Operators (MNOs) began to provide mobile money services. By 2014, the Bank of Zambia announced that the number of mobile money accounts had exceeded the traditional bank accounts. The purpose of this study is to investigate the usage patterns of MNO mobile money services in Zambia. It adopted cross-sectional survey to collect quantitative data from users of mobile money services. A self-administered questionnaire was prepared and circulated in Lusaka province. From the 200 questionnaires circulated, 112 useable questionnaires were returned (56% response rate) and subsequently analysed using SPSS and excel. The research reviewed that the most used mobile money service was airtime recharges followed by fund transfers. Mobile money accounts were least used for purchasing and savings. Most mobile money transfers were payments to recipients outside town. The transfers were mostly to relatives and friends. The research further reviewed that most mobile money users were occasional users and that users were switching between mobile money products depending on their current need.

Takeno, Lucato, Vanalle&Júnior (2015)Proximity as a key factor to narrow the relationship between supplier and its customer – a case study in the auto industry The modern literature shows that the Just in Time (JIT) utilization in the relationship between client and its supplier aims at optimizing the flow in the supply chain. Nevertheless, there are other aspects to be considered for the full utilization of the lean supply practices. Among those, the proximity tries to improve the liaison between the client and its provider of materials and components as a possible response to an increasing competitiveness level. To explore this subject this work had the objective of evaluating the determinant factors that could possibly explain the partial relocation of a manufacturing facility to create proximity conditions with one of its clients. For that purpose, a case study was developed in which a Brazilian auto parts manufacturing company belonging to the first tier of the automotive supply chain was considered. As a result of such study, it was possible to conclude that the strategic advantages resulting from the proximity overpassed the conventional reasoning of considering financial gains as a key factor to justify such a decision. In fact, the cost savings obtained with the plant relocation were not enough to justify the investment made.

Conclusion and Recommendation

From the review of related literature we concluded that the proximity of customers can be realized with ease if Global positioning systems (GPS) is introduced into the logistic companies' operations and as such revenue will grow in the right direction. This is because the difficulties in locating goods ordered for will be checked since customers can sit at home and be able to ascertain the status of the items they have order for. As such the level of retention and service experience customers will obtain will increase which will in turn promote the revenue generated by the organization.

Based on the conclusion of the study we recommend that logistic companies in Nigeria should introduce the use of GPS in relating with their customers. The organization should create a platform that can bring their customers into close contact as this will not only ensure their ability to relate with their customers but will also ensure that customers to customers' relationship are foster. Furthermore, we recommend that that logistic companies must as a matter of urgency gets the data of their actual customers and create a medium that can ensure effective collaboration among them, by ensuring that the image that the customers sells to the public represent a true identity of the organization at large.

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