International Journal of Academic Accounting, Finance & Management Research(IJAAFMR)
ISSN: 2643-976X
Vol. 8 Issue 4 April - 2024, Pages: 9-17

Business Environmental Dynamism and Performance of Selected Manufacturing Firms in Anambra State

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Abstract: *The seeming slow reaction in adapting to change in the technological environment and the concomitant lack of technological adaptation in the area of Information Communication Technology in the studied firms necessitated this study. The broad objective was to ascertain the effect of environmental change on organizational performance of selected manufacturing firms in Anambra State. The study made use of survey research design. The population of the study was 489 employees of the selected organizations and the sample size was 220 determined using Taro Yamane Formula. Data were collected through the use of 5-point Likert scale structured questionnaire. Cronbach Alpha reliability test was used to ascertain the level of internal consistency of the instrument. The analysis was done using Simple Regression analysis with Ordinary Least Square Method (OLS) at 5% level of significance. The result revealed that there is a significant between technological adaptation and customer retention of the selected plastic manufacturing firms in Anambra State. It was concluded that business environmental changes affects significantly organizational performance. Sequel to this, it was recommended that the studied firms should do well to embrace technology in the aspect of attending to customers' needs and complaints and that they should train and retrain their staff on the use of ICT to interface with customers.*

Keywords: Environment; Technology; Customer Retention

INTRODUCTION

Businesses do not operate in a vacuum, but within an environment often termed the business environment. An environment literary means surrounding, external objects, influence or circumstances under which someone or something exists. The environment of any organization is therefore the aggregate of all conditions, events and influences that surround and affect it (Davis, 1975). There are parts of the business environment that are under the control of the organization and this environment is called the internal environment. However, there is a part of the environment that is outside the control of the business and this aspect is called the external environment. Both environments exert enormous pressure and influence on the performance and survival of the business. Hence, organizations need to keep abreast with what happens in these environments.

Understanding the environmental dynamics within which a business organization operates is very crucial not just for the smooth running of business organization but for the heart and soul of the survival of the business. Organizations are constantly required to adapt to a changing environment to sustain their position in the market and even more so if they are to grow (Biedenbacha & Soumlderholma, 2008). The environment is not static, it is dynamic and has various components. This was buttressed by Eruemegbe (2015) who states that the environment in which business organizations operate is a complex, multi-focus dynamic and has a far-reaching effect on such organization. The relationship between the business and the environment is such that they depend on each other. The business depend on the environment for inputs, materials, guidelines and protection while the environment depend on the business for product and services. Hence, Eruemegbe (2015) posits that since business makes demand on the society and the society makes demands on the business, managers in any organization must interact with and respond to environmental factors internal or external to their organizations.

Change is evidenced in business environment as almost on a daily basis, one form of change occur either in the internal or external environment. Hence, the need to remain vigilant so as not to be caught unawares. Okenda, Thuo and Kithinji (2017) avers that most organizations today would agree that change has become a constant phenomenon which must be attended to and managed properly if an organization is to survive. These changes could be in various areas in the environment, it could be on political, social, employee's skills, leadership style and or technology. The emphasis of this study however is on technology which is a significant part of a business environment and its adaptation by firms.

Several factors have recently accelerated the need for rapid improvement of business processes, the most obvious being technology. New technologies are rapidly bringing new capabilities to the business, thereby raising the competitive bar and the need to improve business processes dramatically. Customers are becoming more and more sophisticated, as increasing number of firms are flooding the market giving customers a chance to know and experience different goods and services. This puts pressure on firms to deliver flawless goods and services to customers with lower costs and in least possible time span. Technology is one area that has witnessed tremendous amount of changes and discontinuities in the business world as many things that were hitherto carried out manually are now automated. This is even more so in the area of Information and Communication Technology (ICT). Information communication technology (ICT) is a computer-based tools used to meet with the information and communication needs of individuals and organization. It comprises computer hardware and software, network and several other devices that converts information, images, sound, motion among others into common digital form (Miken exchange on education technology, 2005). Akunyili (2010) defines it as an umbrella term that covers all technical means for processing and communicating information. Practically speaking, ICT finds expressions in digital technology and all its uses and variants, telephony, the different electronic applications (Oluwatayo, 2009). It has helped many organizations navigate through difficult communication issues. Since its inception, communication has been made more effective and efficient but has also presented a great challenge for organization that have not keyed into what ICT represents.

Plastic manufacturing firms use different equipment in manufacturing, most of the equipment have been automated through improved technology. Some of the organizations studied have also bought some of this technologically enhanced equipment. However, it appears that little is done in the area of adopting technology in communication with employees and the customers which seem to be affect their performance. It is against this backdrop that this study was carried out.

Statement of the Problem

Technology no doubt presents a lot of improvement in the way things are done in the present world of business. It makes for faster production process, service delivery and customer interface and interaction. It also presents a great deal of challenge as employees and customers are more aware and are demanding for better products and services. They feel things can be done much better thereby putting businesses under severe pressure to do more in terms of customer satisfaction. It was observed in most of the firms studied that they have adapted to changes in technology by installing improved machineries to produce more efficiently and effectively and to meet customers demand for more durable product and swift delivery.

Little however seems to be done in the area of deployment of technology in communicating with employees and the customers; and in the area of process development. It was discovered that meetings still have to be being held in conference rooms or offices before decisions are made and messages are still pasted on the walls or notice boards of these organizations. Customers have to come to the office premises to make their complaints. The organizations have no form of interfacing with the customers via the internet, they also have no customer care line where customers can hook onto and reach the organization. These connote the absence of upward changes on the firms' methods of doing things as these firms have stuck to the old fashion ways of attending to their market needs. This has been observed to delay the response rate of the organization to customers complain. Decisions that would have been taken swiftly through various online platforms are delayed till various management staff and employees meet to deliberate thereby frustrating the customers. This is capable of impeding the performance of the organizations as customers complain of going through rigorous processes to get their complaints sorted out. It appears to be easier to place an order than to get reprieve for complaints. This could lead to reduced capability of the organizations to satisfy and retain their customers and would ultimately affect the performance of the organizations. This gave credence for this study to be carried out to look at how environmental changes impacts on performance of organizations.

Study Aim and Objective

The broad objective of the study was to ascertain the effect of environmental change on the performance of selected plastic manufacturing firms in Anambra State; while the specific objective of the study was to determine the nature of relationship that exists between technological adaptation and customer retention in the selected manufacturing firms.

Research Questions

What is the nature of relationship existing between technological adaptation and customer retention in the selected manufacturing firms in Anambra State?

Research Hypothesis

H_o: There is no significant relationship between technological adaptation and customer retention in the selected manufacturing firms in Anambra State.

Significance of the Study

Given the rapid change especially in ICT, this study will be relevant to all forms of organization but especially to the studied organizations. This is because it will expose to them more effective and efficient ways of adopting technology to improve their performance. Also, the study will benefit the academic world as it will add to the already existing literature on environmental change and performance. Management experts and consultants will also benefit from this work as it will be a good reference material for them.

Scope of the Study

The focus of the study was on environmental change and organizational performance. This was captured by technological adaptation and customer retention. The geographical scope is Anambra State, while the organizational scope includes Danco-Mannyon Industries Limited, Humek Company Nig Limited, Innoson Group of Companies, Orie-Plast Comapanies Limited, and Gongoni Company Limited. Others are Christoplast Industry Limited, Good Poly Industries Nigeria, Kristoral and

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Company Limited, Ano Plastic Metal Industries and Millenium Company Limited.

REVIEW OF RELATED LITERATURE

Conceptual Review

Environmental Change

The concept of environmental change will not be fully appreciated if environment as a concept is not fully explained. The environment being referred to here is the business environment where an organization exist. A business environment is the totality of all things that influence or is influenced by an organization whether within or outside the organization. Buttressing this point, Voiculet,Belu, ParpandelandRizea (2010) opine that an organization's environment includes a set of 'actors' and interest groups represented owners, managers, customers, suppliers, amongst others. These are stakeholders, who are directly or indirectly affected by the organization's work and have the means to control over it. Keeping the definition simple however, Eruemegbe (2015) posit than an environment is the totality of the surroundings of the organization.

A business environment can distinguish one organization from another. This was captured by Almanae (2007) who states that business environment is seen as a set of characteristics that describe the organization and distinguishes it from other organizations within a given period affecting behaviour of personnel therein. The environment tends, shape the outlook, and goal of the organization by placing constraints on them. These constraints in the environment of organizations goal could be in the form of competition, this sets a limit on the goals specified by the organization (Eruemegbe, 2015).

Having looked at environment, it is now pertinent to know what change is before bringing them both (environmental change) together. Change simply means transformation, becoming different from what use to be, discontinuity with the status-quo. Veldsman (2008) regards organizational change as the transformation from the current state of the organization to the desired state. Van Tonder (2004) attempts to provide generic definitions namely, "change is a process that is dynamic and bound to time and clearly not discrete; change is evident in the state and/or condition within a state of an entity; and change as difference does not occur in void but is bounded by its context."

Environmental change has to do with transformation that occurs in a business environment. All the things that happens differently from the way it used to in the environment of business is referred to as environmental change. Ansoff and McDonnell (2010) state that changes arise out of the need for organizations to exploit existing or emerging opportunities and deal with threats in the market. It is crucial that organizations seek to create a competitive advantage and wherever possible innovate to improve their competitive positions. This implies the readiness to change within the organization and the ability to implement the proposed change.

It is however important to note that business environment could be internal or external to the business. The internal environment is under the control of the organization and can be influenced while the external environment are outside the purview of an organization's control and can only be adapted to. Voiculet, Belu, Parpandel, and Rizea (2010) state that the external environment consist of economic, social, political, technological and legal while the internal environment consist of elements such as resources, structure, organizational culture, leadership style, manner of exercising the power, employees competence, customers, product and service types amongst others. Almanae (2007) posits that environmental factors (external environment) are represented in the surrounding factors in the organization affecting it including political and legal, economic, social, technical and technological, and ecological environments. Changes that occur within the external environment cannot be controlled and presents threats and opportunities, while the internal environment can be controlled and influenced and presents strengths and weaknesses depending on how it is handled.

Technological Adaptation

Adaptation means the process of changing something to suit a particular situation. It is the process or condition of being adapted; something produced by modification. Technological adaptation can be defined as a process that begins with awareness of the technology and progresses through a series of steps that end in appropriate and effective usage. It is the key issue for the enterprises to be able to manage the technological changes. The adaptation in this case, means to be able to adapt new and emerging technologies into an organization. This definition implies that the technology adaptation is affected with the capability of the enterprise performing technology forecasting as well as doing innovations. It includes tool effect, human effect and knowledge effect. When technological adaptation is completed, it will be implemented with technological forecasting and technological innovation phases to form the technological change management model (Ayhan, 2008).The essence of technological adaptation is to make an analysis of structure change in organization, in order to adjust to the impact brought about by technology. It is the application of technology in order to reduce vulnerability. It entails changing from the existing technology so as to suit the situation or circumstances in the organization or firm. Technological Adaptation includes; Awareness – potential users learn enough about technology and the benefit to decide whether they want to investigate further; Assessment – potential users evaluate the usefulness and usability of the technology, and the ease or the difficulty of adopting; Acceptance – potential users decide to acquire and use the technology, or decide not to adopt; Learning – users develop the skills and knowledge required to use the technology effectively; and Usage – users demonstrate appropriate and effective use of the technology (www. bridges-to-technology.com).

Organizational Performance

Performance refers to the metrics relating to how a particular request is handled, or the act of performing; or doing something successfully; using knowledge as distinguished from merely possessing it (Okenda, Thuo & Kithinji, 2017).It is the outcome of all of the organization's operations and strategies, (Venkatraman &Ramanujam, 2001). A firm's set of operational routines is made up of the organizational processes and routines formed and shaped by organizational learning mechanisms (Cepeda & Vera, 2007).Performance can be defined as a completion of a task assigned to an individual or a group of individuals to perform, or the energy afforded by an individual in performing the work required to be carried out whether energy being mental or intellectual (Almanae, 2007). It is also defined as the extent of success or failure of an individual in realizing the objectives required from him/her in work (Raslan, 2001). Jones and George (2009) state that it is the measure of how the manager utilizes the resources of the organization as well as satisfy its stakeholders. It is the accomplishment of a given task measured against pre-set known standards of accuracy, completeness, cost, and speed. In a contract, performance is deemed to be the fulfilment of an obligation, in a manner that releases the performer from all liabilities under the contract. Performance of industry comprises the actual outputs or result of an organization as measured against its intended output (goals and objectives). The performance also encompasses three specific outcomes: financial performance (profit, return on assets, productivity, and return on investment), product market performance (market share, sales) and shareholder return (total shareholder return, economic value added) (Richard, Devinney, Yip & Johnson, 2009)

Changes in the environment and how organizations respond or react to them determine the performance of organization. Eruemegbe (2015) posits that organizations survival and success depend on the appropriate adoptions to a complex and ever changing environment. Although researchers have shown that aspects of change such as change communication, participation, the attitude of top management, leadership and readiness for change are related to increasing organizational performance, the contribution of these aspects of change has been studied empirically (Bhattacharya, Gibson& Doty, 2005).

Customer Retention

There was a time when consumers were familiar with the merchant's products, and storekeepers knew their consumers and their needs. However, 19th and 20th century technological developments provided buyers with greater market opportunities and merchants slowly began to lose their local monopoly on commerce and started losing customers (Nataraj, 2010). The personal merchant-consumer relationship gradually diminished when technology provided shoppers with other options. Therefore, organizations started thinking of how to retain the loyalty of customers. The goal of organizations is to improve service and regain lost market share. Customer retention has now become a primary objective of organizations these organisations have started talking about customer retention management (CRM). Although most firms use CRM for new customer acquisition, many believe the real value of CRM is customer retention (Chan, 2005). This emphasis allows firms to learn meaningful information about the customer, learn how to satisfy them, and determine how and why customers interact with the company. CRM also builds technical and non-technical communication networks which strengthens the relationship between business and consumers (Tokman, Davis& Lemon, 2007).

Satisfaction, loyalty and commitment are three primary components of an effective CRM-retention program (Terblanche, 2006). Each customer's needs are different, and CRM would not be necessary if all customers were homogeneous. CRM identifies and helps retain valued customers, increase the customer base, utilizes pricing signals to encourage less profitable consumers to become loyal and more profitable, and uses technological adaptation to offer sophisticated and good quality products to customers (Milakovich, 1995). Higher retention leads to lower customer defection and higher profits which will catapults the performance of the organization and helps it have a competitive edge over competitors (Sorce & Edwards, 2004). Lengthy customer relationships reduce acquisition and business activity costs. This can be significant when new customer acquisition costs are high (Yoda & Kumakura, 2007). Moreover business relationships that foster customer tenure can improve the firm's efficiency as purchase volume increases and relationship cost decrease (Ang & Buttle, 2005).

Theoretical Framework

This work is anchored on Competitive Advantage Theory credited to Micheal Porter in 1980. The term competitive advantage refers to the ability gained through attributes and resources to perform at a higher level than others in the same industry or market (Chacarbaghi & Lynch, 1999). A firm is said to have a competitive advantage when it is implementing a value creating strategy not simultaneously being implemented by any current or potential player (Clulow, Val, Gerstman, Julie, Barry, & Carol 2003).

Competitive advantage is seen as the strategic advantage one business entity has over its rival entities within its competitive industry. It is a business concept describing attributes that allow an organization to outperform its competitors. Achieving competitive advantage strengthens and positions a business better within the business environment. Successfully implemented strategies will lift a firm to superior performance by facilitating the firm with competitive advantage to outperform current or potential players (Passemard & Calantone 2000). To gain competitive advantage, a business strategy of a firm manipulates the various resources over which it has direct control and these resources have the ability to generate competitive advantage (Rijamampianina, 2003). The attributes that could provide competitive advantage for a firm may include access to natural resources, highly skilled personnel, geographic location, high entry barriers. Competitive advantage makes sure customers remain loyal through offering superior products and services. Value proposition is important when understanding competitive advantage (Passemard & Calantone 2000).

The relevance of the tenets of this theory to this work is that adapting to and adopting technology in the whole gamut of customer service provision provides organizations with competitive edge which will improve the performance of the organization by keeping the customers loyal to the firm.

Empirical Review

Eruemegbe (2015) carried out a study on the impact of business environment on organization performance in Nigeria. The study relied on questionnaire to generate relevant data. Out of 39 questionnaires administered on officers in Union Bank of Nigeria, Lagos, only 20 were properly completed and returned. The survey revealed that, among the top ten critical factors (i.e. teamwork, work based on contract, supervision based on leadership by example and provision of equipment) had great effect on motivation as well as impact on productivity. More so communication, love and belongingness, opportunity to undertake challenging task, identification with goal and overtime were among the critical factors.

Khatoon and Farooq (2016) did a study to explore the relationship between the aspects of change and organizational performance as well as to study the impact of these aspects of change on performance. The constructs considered in the study included quality of change communication, participation, attitude of top management toward change, leadership and readiness for change on performance in the organization. A research instrument was designed based on extensive literature review of the change, and organizational performance and data were collected from organizations that were segregated on the basis of the public and private sector and also manufacturing and service industry. The research instrument was pilot tested, and necessary modification was made.The reliability and validity of the instrument were determined using Exploratory Factor Analysis (EFA). Correlation was used to analyse the data. It was revealed that a positive relationship exists between aspects of change and organizational performance.

Njoroge, Ongeti, Kinuu and Kasomi (2016) sought to establish the influence of external environment on performance of Kenyan State corporations. The study's population consisted of 108 Kenyan state corporations and data was collected from 98 organizations. The results revealed that external environment had a positive significant influence on all the indicators of performance. It was evident from the findings that the effect of external environment on organizational performance, while conventionally thought to be negative, the research showed otherwise. Results also revealed that indeed the external environment has a direct relationship and influence on organizational performance. This results seem to allude to an environment-performance paradigm.

Almanae(2007) analysed organizational environment prevailing in Libya, and its effect on performance. It also determines type of relationship between organizational environment elements and recognizes which of them, has more influence on personnel performance than the remainder. The study was conducted in three insurance companies, in Libya and it was based on a questionnaire form randomly distributed among the study sample. The study found out that the constituent elements of the organizational environment vary in their degree of effect on personnel performance. The study, likewise, resulted in dissatisfaction of personnel regarding some aspects of work including absence of co-ordination between units, vagueness of the relationship between them and absence of concern to personnel, and absence of carefulness, social and cultural care and recreation necessary for personnel.

Okenda, Thuo, and Kithinji(2017) established the effects of change on organizational performance. The study population was 1035 staff members of the ministry of environment, water and natural resources who has experienced various forms of organizational change. Stratified random sampling was used to choose 104 respondents. Primary data was used where a questionnaire was employed to collect primary data. Descriptive and inferential statistics was conducted to analyze the data. From the findings, it was revealed that change in information systems, change in organization structure, change in organization size and change in leadership affected performance.

Miroslav, Ilaria and Elisa (2012) executed a study on technological change and organizational performance in Europe. The study examined the relationship between technological change and organizational performance. Data were drawn from the European Working Condition Survey. Simple correlation was used to analyse the data for the study. The study found out that there is a relationship between technological change and organizational performance. The study acknowledged that it is of importance of the employees to assimilate new technology.

Dauda and Akingbade (2011) carried out a study on technological change and employee performance in selected manufacturing industry in Lagos State of Nigeria. The study was guided with four objectives. The population of the study consists of 1256 employees from 30 manufacturing industry in Nigeria. Data was collected using questionnaire using a five point likert scale. The variables in the questionnaire were correlated. The data were analyzed using inferential statistical method of regression and ANOVA. The finding reveals that employee relations do not have significant relationship with technological change. The study recommends that employee relation should be considered in the management of techno logical change for profitability, competitiveness and survival of the Nigerian industry.

Omoju, Ikani, Ribadu and Chukwunonso (2011) ascertained the linkage between information and communication technology and firm performance of CHAMS Plc in Abuja. Data were gathered through questionnaires and interview. Nineteen respondents were used. Frequency and percentages were used to analyse the data. The findings showed that information and communication technologies alone cannot produce sustainable advantages, but that firms must organize and manage information and communication technologies in such a way as to leverage the complementary human and business resources. The results also suggest that adopting information technology has positive effects on innovative practices, which increases the competitive advantage of firms.

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Akbar (2011) determines the effect of technological change on management accounting change in Iran manufacturing firms. The study used descriptive survey design. T test, Friedman test and Kruskal test were used for the hypothesis. Both the primary and secondary data were used for the study and the industries used were randomly selected. 150 questionnaires were given out while 112 were answered. The result was that technological change has effect on management accounting change. The study recommends that firms must replace traditional and individualized method of working in order to increase the quality and reduce the cost price.

Gap in Knowledge

While a number of studies have been done in the area of change management and environmental change, and how they play a role in providing competitive edge and improving organizational performance. little has been done on technological adaptation and how it relates to customer retention; and process innovation and how it affects customer satisfaction in the studied plastic firms in Anambra State.

METHODOLOGY

Research Design

The study adopted a Survey Research Design. A survey research design is such that allows for collection of data from a sample respondent about variables using questionnaire, interview or observation. Given that the data for the study will be collected using questionnaire about the variables of the study, Survey Design was deemed most suited for the study.

Population of the Study

The population of the study comprised the employees of the 10 selected plastic firms in Anambra State which summed up to 489. The distribution of the employee strength of the organization is giving in Table 1 below:

Table 1: Population Distribution

S/N	ORGANNIZATIONS	POPULATION	PROPORTION
1	Danco-MannyonIndustries Limited	32	.07
2	Humek Company Nig Limited	28	.06
3	Innoson Group of Companies	102	.21
4	Orie-PlastComapanies Limited	31	.06
5	Gongoni Company Limited	38	.08
6	Christoplast Industry Limited	36	.07
7	Good Poly Industries Nigeria	57	.12
8	Kristoral and Company Limited	48	.1
9	Ano Plastic Metal Industries	42	.08
10	Millenium Company Limited	75	.15
	Total	**489**	**1**

Source: Field Survey and Personnel Records of the Firms, 2019.

Sample Size and Sampling Technique

The sample size of the study was determined using Taro Yamane Formula. The formula used in the calculation is gien below:

$$n = \frac{\mathrm{N}}{1 + N(e)^2}$$

Where N=population

n=sample size

e=error estimate (5%)

$$n = \frac{489}{1 + 489(0.05)^2}$$

$$n = \frac{489}{2.2225}$$

$$n = 220$$

The instrument was distributed to the companies based on the proportion of the individual companies against the entire sample population of the study as given in table 2. The sampling technique used in distributing copies of questionnaire to the organization was stratified sampling technique. The 3 levels of staff categories namely junior, middle and senior staff was used as a base for stratification.

Table 2: Questionnaire Distribution Schedule

S/N	Organisations	Sample Size	Proportion	Distributed	Analysed
1	DancoMannyon Industries Limited	220	.07	15	13
2	Humek Company Nig Limited	220	.06	13	10
3	Innoson Group of Companies	220	.21	46	37
4	Orie-PlastComapanies Limited	220	.06	13	12
5	Gongoni Company Limited	220	.08	18	12
6	Christoplast Industry Limited	220	.07	15	10
7	Good Poly Industries Nigeria	220	.12	27	23
8	Kristoral and Company Limited	220	.1	22	20
9	Ano Plastic Metal Industries	220	.08	18	16
10	Millenium Company Limited	220	.15	33	27
	Total	**220**	**1**	**220**	**180**

Source: Field Survey and Personnel Records of the Firms, 2019.

Table 2 shows the copies of questionnaire distributed to the organizations using the population proportion of each of the firms. At the end, a total of 193 copies were collected while 180 were finally analysed because some of the collected copies of questionnaire were not properly checked or incompletely filled.

Data Collection

Data for the study was collected using a five (5) point Likert scaled questionnaire. The codes used ranges from 5 for strongly Agree, 4 for Agree, 3 for Undecided, 2 for Disagree while 1 for Strongly Disagree. The questionnaire contained 10 items, 5 items each for the dependent and independent variables.

The instrument was validated using a combination of face and content validity with the help of management experts and lecturers in Nnamdi Azikiwe University, Awka. The face validity was to make sure that on the face value, the questionnaire was valid. That is, that it is not too lengthy, properly structured and unambiguous. While content validity was to ensure that the questionnaire contains enough questions to appropriately measure the variables of the study with the objectives of the study in mind.

The consistency level of the instrument was measured using Cronbach Alpha reliability technique. The result obtained as shown in Table 3 below signifies that the instrument is 87% and 91% respectively for items on technological adaptation and customer retention. Hence, the instrument was adjudged to be good for the study.

Table 3: Reliability Statistic

Variables	Cronbach Alpha Values	N of Items
TechAd	**.872**	**5**
CusRet	**.913**	**5**

Source: Field Survey, 2019 **Computation: SPSS ver. 20**

Keys
TechAd: Technological Adaptation
CusRet: Customer Retention

Method of Data Analysis

The data analysis was done using Simple Regression analysis with Ordinary Least Square Method (OLS) at 5% (0.05) level of significance. This is because the study sought to determine the relationship existing between the variables of the study.

DATA ANALYSIS

Test of Hypothesis

Table 5: Regression Output

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.983[a]	.967	.967	1.232

a. Predictors: (Constant), TechAd

Source: Field Survey, 2019.

Table 5 shows the result of regression analysis carried out. It shows the coefficient of determination (R Square) at .967 (97%) and correlation coefficient (R) at .983.

Table 6: ANOVA Output

ANOVA[a]

Model		Sum of Squares	Df	Mean Square
1	Regression	7977.883	1	7977.883

International Journal of Academic Accounting, Finance & Management Research(IJAAFMR)
ISSN: 2643-976X
Vol. 8 Issue 4 April - 2024, Pages: 9-17

Residual	270.178	178	1.518		
Total	8248.061	179			

a. Dependent Variable: CusRet
b. Predictors: (Constant), TechAd
Source: Field Survey, 2019.

Table 6 reveals the result of ANOVA produced with the regression output. It indicates the fitness of the model (F) at 5256.026and the probability value (Sig) at .000.

DISCUSSION OF FINDINGS, SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

Discussion of Findings

The result of the analysis carried out revealed that there is a significant relationship between technological adaptation and customer retention in the selected plastic manufacturing firms in Anambra State. The result of the test of hypothesis showed that a 97% change in customer retention is explained by changes in technological adaptation, indicating that an increase in the adaptation to technology by the studied firms will lead to a concomitant change in customer retention. That is, the more technology is adopted and adapted in the firm in the area of treating customers complains swiftly, the more the customers will be satisfied and retained. When complains can be filed by customers online, when discussion can be held with the organization through technology without having to pass through the stress of coming to the organization's premises, and when employees can communicate as quickly as possible through technologically empowered means to handle issues as quickly as possible, then customers will have confidence in the organization, trust the organization more and the organization will be able to retain the customers. These findings are consistent with that of khatoon and Farooq (2016) which revealed that a positive relationship exists between aspects of change and organizational performance. Similarly, Okenda, Thuo and Kithinji (2017) found out that change in systems, changes in structure, and size affect performance. Also, the finding of Miroslav, Ilaria and Elisa (2012) that found out that there is a relationship between technological change and organizational performance corroborate the findings of this study.

Summary of Findings

From the regression analysis carried out, it was revealed that there is a significant relationship between technological adaptation and customer retention in the selected plastic manufacturing firms in Anambra State as shown by the correlations coefficient (R) which is shown to be .983. The model is shown to be statistically significant as revealed by the p-value of .000 which is less than 0.05 level of significance applied in this study. Hence, the alternate hypothesis is accepted.

Conclusion

Drawing from the findings of the study, it is concluded that business environmental change impacts significantly on organizational performance. Therefore, whatever changes occur within the technological architecture of the firms, impacts significantly on the customer satisfaction and retention dynamics of the firms.

Recommendations

Following the findings and conclusions of the study, the study recommends that:

1. The studied firms should do well to embrace technology in the aspect of attending to customers' needs and complaints as this will go a long way in endearing the organizations to the customers.

2. The studied firms should be proactive in updating their business methods so as not to lose their customer base to rival firms.

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