
Organizational Change and Productivity of Manufacturing Firms in Rivers State

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Abstract: *The research studied on organizational change and productivity of manufacturing firms in Rivers State. A causal research overview of the semi test configuration was decided for this study with the guide of helpful inspecting procedures, all components that constituted the sample measure were 132 administration staff from the 10 chosen manufacturing firms in Port Harcourt, Rivers State were directed to respondents and after recovery and information cleaning one hundred and twelve (112) duplicates were utilized for examination. The Spearman rank order coefficient relationship was utilized for the investigation with the mix of inferential measurable devices with statistical package for social sciences (SPSS) variant 21.0 encouraging the research. The discoveries, thusly, uncovered that; a noteworthy relationship exists between change in technology and sales growth; total quality management and sales growth. It was thusly, suggested among others that Manufacturing firms' administrator ought to be prepared to adjust to new framework present day method for creation, for example, PC based machine that can help encourage change in sales and optimum benefit.*

Key words: *Organizational change, change in technology, total quality management, productivity, sales growth*

1. INTRODUCTION

High efficiency in the Nigerian manufacturing industry is a vital condition for the segments' recuperation, accomplishing aggressiveness, boosting the GDP and elevating the ways of life of the general population. Accomplishing high efficiency will require a frontal assault on the current issues. The manufacturing part needs to enhance profitability through overhauling of its advances. Innovation can enhance profitability in four noteworthy ways: better hardware that can lessen production time and costs; better strategies and process controls; leap forward into totally better approaches for getting things done and product outlines that can enhance aggressive edge and decrease costs. Most machines that are presently being used are out of date and the cost of keeping up them is high. They ought to be supplanted with present day machines that have better product outlines and quicker in forms. Computerisation of procedures and methods ought to be set out upon to spare time and expenses.

The expanded pace of progress in the course of recent years has been emotional. Rivalry has warmed up no matter how you look at it. To succeed, the association without bounds must serve clients better, make new points of interest and get by in sharply challenged markets. To remain focused, organizations must get rid of work and procedures that don't include esteem. This hyper rivalry has nullified the fundamental presumptions of supportable markets. There are few organizations that have gotten away from this move in aggressiveness. Passage hindrances,

which once applied a balancing out power on rivalry, have fallen notwithstanding the quick changes of the data age. These powers have tested our ability to adapt to firm life required. Overseeing change viably requires a comprehension of the factors at play, and satisfactory time must be considered implementation.

Firms' change is the execution of new strategies or advances expected to realign an association with the changing requests of its business condition, or to benefit from business openings. Also, hierarchical change administration is the way toward perceiving, controlling, and dealing with these human feelings and responses in a way that limits the inescapable drop in profitability that goes with change. Firms need to manage new innovation, and with overhauls for existing innovation. They need to adapt to rearrangements, process change activities, and mergers and acquisitions.

Go and Pine (1995), expressed that fast and capricious changes in client states of mind and data innovation roll out the need to oversee improvement unavoidable and that the capacity to oversee change was the way to the long haul survival of manufacturing organizations. Mullins (1995) likewise asserts that elements, for example, unverifiable monetary and political conditions, changes in social states of mind, savage rivalry, take-over's, acquisitions, innovative improvements and administrative intercessions make an undeniably unstable condition for manufacturing ventures and subsequently they can just perform viably through adaptability and responsiveness to change. Development of innovation in current firm change is to a great extent spurred by outside advancements as opposed to inward moves. At the point when these improvements happen, the firms that can receive rapidly make an upper hand for themselves, while the organizations that decline to change get left behind. This can bring about uncommon benefit or potentially piece of the pie misfortunes (Peterson, 2012). However for change to create its coveted impact it must be acknowledged and grasped by the hierarchical workers; yet this isn't frequently the case. Most changes brings about worker protection of progress in the association; along these lines bringing about poor spirit and profitability.

The vast majority of the writing on firm change, in any case, has been identified with manufacturing businesses however have neglected to address the particular issues related with these ventures. As Kaiser (1999) and Wood (1994) bring up, the manufacturing business has specific attributes which have suggestions for the adjustment of non-specific administration standards. Besides, there has been next to no examination into overseeing change in the manufacturing business. As indicated by Nzuve (1999), firm is a framework whose survival relies upon its capacity to receive to changes in a domain. Cole (2000), states that to change something suggests adjusting it differing or altering it somehow. Administration of progress is for the most part a reaction to outside conditions which are responsive to change. Changes typically exhibit difficulties to an association and the supervisors which expects them to adjust to the rising changes. As indicated by Mullins (1991), Organizations for the most part present changes through individuals unless individuals will acknowledge the requirement for firm change, the expected change can't change the people dispositions and their behavioural examples to coordinate the embracing changes. Most importantly, there exist a writing gap and our purpose of flight is to observationally examine the impact of firm change on efficiency of manufacturing firms in Rivers State.

Research Problem

The manufacturing segment is noted as one of the apparatus of development for work, a maker of riches and the edge for sustainable advancement however it is by all accounts confronting a greater number of difficulties than some other area in Nigeria. The powerlessness of the segment to adapt to challenges is reflected in its grim execution throughout the years. All pointers of performance for the segment are negative. Limit use which is a decent measure of performance for the segment has been alarmingly low finished the years. As at 1977, capacity usage in the sector remained at unsurpassed high of 78.8 percent, it was down to an unequaled low of around 29.3 percent as at 2004, (CBN, 2004). In spite of the fact that there was a noteworthy change from 1996 untouched low, it is still far underneath desire. The Nigeria manufacturing division has not possessed the capacity to contribute altogether to the financial improvement of the nation as demonstrated by its commitment to the country's GDP. In 2007, its commitment to GDP was an insignificant 7.4 percent (MAN, 2008). The high rate of mortality in the sector obviously features the failure of the segment to adapt to its difficulties particularly technological difficulties. As per Jide (2006), more than 750 firms in the part have shut down in the current past and numerous more face the possibility of impending breakdown sooner rather than later. As at 2006, a study by MAN demonstrates that 30 percent of the area were named shut down, 60 percent were feeble while just 10 percent were working at maintainable level (MAN, 2006). As of now, Nigeria uncovered rebased total national output (GDP) figures for 2013 demonstrated a 89 percent bounce in the evaluated size of its economy yet the manufacturing sector which should be the main thrust of emerging economy like Nigeria is falling behind. In view of this realities, this research in this manner looks to inspect the impact of organizational change on productivity of manufacturing firms in Rivers State.

Objective of the Study

The purpose of the research was to examine the influence of organizational change on productivity of manufacturing firms in Rivers State. Specifically, the study seeks;

1. To examined the relationship between change in technology and productivity of manufacturing firms in Rivers State
2. To determine the relationship between total quality management (TQM) and productivity of manufacturing firms in Rivers State

Research Questions

The following stated questions would guide the study;

1. What is the relationship between change in technology and productivity of manufacturing firms in Rivers State?
2. What is the relationship between total quality management (TQM) and productivity of manufacturing firms in Rivers State?

Study variables and Research Framework

Our independent factor is organizational change with its measurements as change in technology and total quality management while the dependent variable is productivity with its measures as sales growth. These variables attribute and explanations are as follows:

Organizational Change: This is when an organization undergo a business transformation as a result of management decision.

Change in Technology: This is an expansion in the effectiveness of a product or process that fallout in an increment in yield, without an expansion in input

Total Quality Management: It's a depiction of the way of life, demeanor and association of an organization that endeavours to give clients products and services that fulfill their requirements.

Productivity: Productivity is ordinarily characterized as a proportion between the yield volume and the volume of sources of info.

Sales Growth: This is alluded to as the sum by which the normal deals volume of an organization's products or services has developed.

Functional Relationships and Model Specifications

With regards to useful connections, the examination's destinations are to demonstrate useful connections among two measures of independent factors – change in technology and total quality management and for the dependent factors – sales growth. This study is only developing a functional relationship rather than model specifications. The useful connections for the investigation are as shown beneath:

- OP= f (CE) (i)
- CE= RT, I, Pr (ii)
- OP = P (iii)

Where:

- OC = Organizational Change
- CT = Change in Technology
- TQM = Total Quality Management
- P = Productivity
- SG = Sales Growth

Theoretical Framework

Systems Theory

Systems theory is an idea that began from science, financial aspects, and building, which investigates standards and laws that can be summed up crosswise over different frameworks (Yoon and Kuchinke, 2000; Alter, 2007; Dubrovsky, 2004). A system is an arrangement of at least two components where: the conduct of every component affects the conduct of the entire; the conduct of the components and their consequences for the entire are associated; and keeping in mind that subgroups of the components all affect the conduct of the entire, none independently affects it (Skyttner, 1996). At the end of the day, a system involves subsystems whose between connections and association advance toward balance inside the bigger framework (Martinelli, 2001; Steele, 2003).

Research Framework

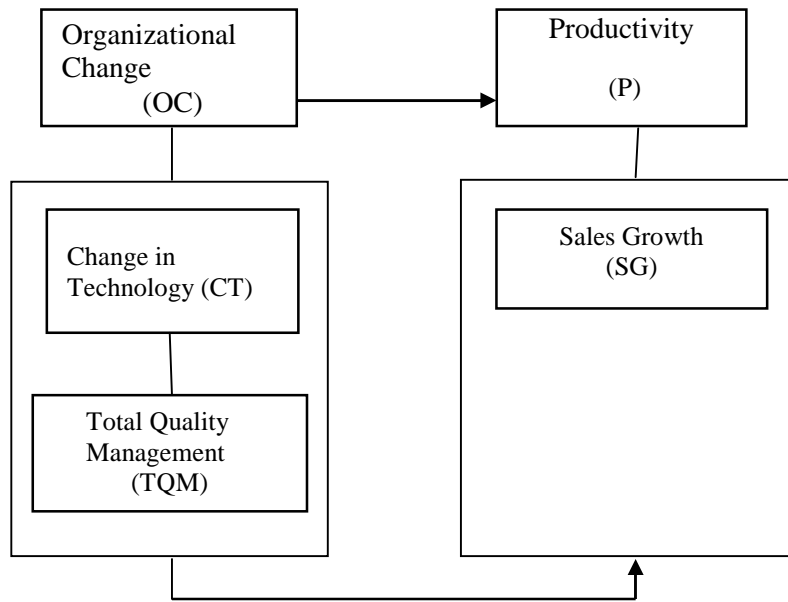


Fig. 1: Conceptual framework on Organizational Change and Productivity of Manufacturing Firms in Rivers State

Source: Survey Data, 2017

Operational Conceptual Framework

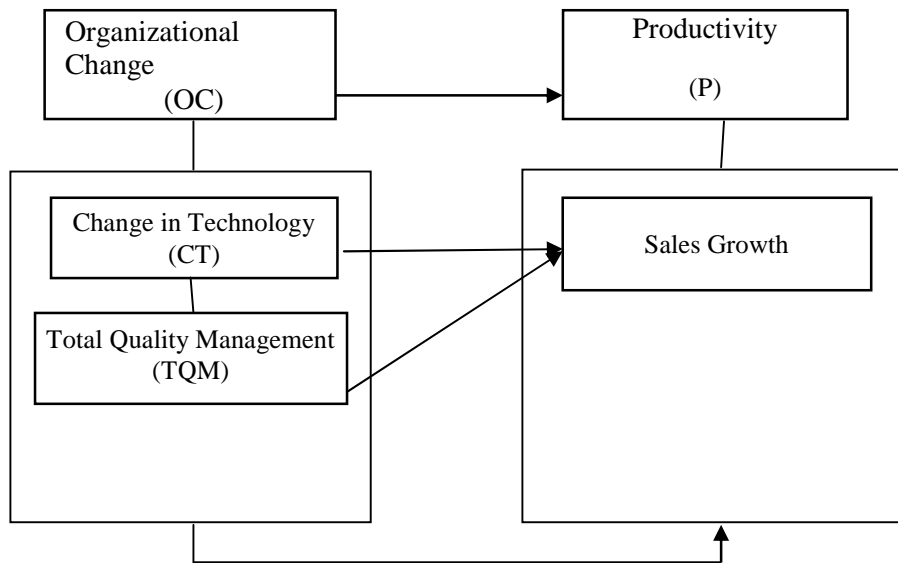


Fig. 2: Operational Conceptual framework on Organizational Change and Productivity of Manufacturing Firms in Rivers State

Source: Survey Data, 2017

Research Hypotheses

Based on our research framework, the below hypotheses are formulated in null form:

H0₁: There is no significant relationship between change in technology and sales growth of manufacturing firms in Rivers State.

H0₂: There is no significant relationship between total quality management and sales growth of manufacturing firms in Rivers State.

2. REVIEW OF RELEVANT LITERATURE

Concept of Organizational Change

The meanings of organizational change are for the most part portrayed as the change of a framework starting with one state then onto the next, to encounter separation, a change in the social, auxiliary and mechanical fields of an association, and the reactions given to the earth (Saylı and Tüfekçi, 2008). From another point of view, firm change incorporates every one of the occasions and marvels, for example, innovativeness, advancement, improvement, change and so on through the basic adjustment of the associations to their surroundings (Töremen, 2002). In his research, Rensis Likert stressed the coherence of the change, expressing that every one of the firms encounter either little or huge changes as it were (Saylı and Tüfekçi, 2008). As comprehended from the clarifications, firm change can be seen in three noteworthy fields: change in the human factor, change in the firm structure, and change in innovation. Change in human factor alludes to radical changes in accepts and practices, incorporating the adjustment in the learning, abilities and states of mind of employees in relationship with recently set administration procedures. Change in firm structure suggests redefinition and direction of firm roles and relations. In rolling out improvements in firm structure, techniques are utilized, for example, extending or diminishing audition, deciding the decision making expert, choosing decentralized or focal administration process, managing correspondence channels and so on. Change in innovation includes changing the innovation that a firm uses to build the quality underway (Töremen, 2002).

The reason that leads companies to change is the idea that the advantages of firm change for an association exceed the subsequent bedlam and dangers in the firm. Discontents in an association additionally affect finding a way to begin change and to create elective ways. In this sense, it is conceivable that the requirement for a firm change may rise as incitement from inside the association, while it might likewise be made out of the plan to adjust to changes in outer condition. All things considered, for any association which does not have any desire to close down and stop to exist, it is very imperative to find a sense of contentment and good for the progressions around it.

When it is viewed as that with a specific end goal to be current association, it is important to be touchy to improvements on the planet and always restore itself, we can without much of a stretch comprehend why associations need to take after changes and advancements and why they receive this point (Turan, 2011). At the point when the literature is explored, it is seen that there are some essential points of firm change process which has an extraordinary significance for companies (Töremen, 2002). In like manner, it is seen that the significant point of firm change is to build viability and efficiency while it is expected to incorporate the necessities of a work and the capabilities of the people who do that work with a specific end goal to do that work more powerful and an authoritative structure is wanted in which the labourers have the largest amounts

of fulfillment (Töremen, 2002; Turan, 2011). Aside from this, different points of firm change can be recorded as to be prepared for future, to build up links that rely upon shared trust between the labourers in the firm, to enhance correspondence, to create recommendations to tackle the issues experienced, to make collaboration, to keep up the wholeness and coherence of an association (Töremen, 2002).

Dimensions of Organizational Change

Change in Technology

The word technology has been gotten from Greek words “techne” meaning workmanship or ability and “logia”. In setting of everyday practice “technology” is an unmistakable word alluding to the utilization and information of humankind's devices and systems. Innovation is one of the focal and most critical components identified with compelling activities administration in an association. It can be characterized as an assemblage of information used to make apparatuses, create aptitudes, and concentrate or gather materials. It is additionally the utilization of science (the mix of the logical technique and material) to meet a goal or take care of an issue (Molinero, 2012). Technology expands the prospect for leading business in more effective and aggressive ways that are systematically not quite the same as the past.

Total Quality Management (TQM)

Total quality management (TQM) is a deliberate quality change approach for vast administration to improve performance as far as quality, efficiency, consumer loyalty, and benefit. Since TQM rehearses have been grasped by numerous organizations around the globe for quite a long time, they have earned the consideration of numerous analysts from different territories. TQM is an administration reasoning that is planned to engage each individual from the association. It is expected to advance consistent, supported, and long term change in quality and efficiency and to dispense with workers' dread of progress. Its essential standard is that the cost of avoidance is not as much as the cost of redress. Bellis-Joneand Hand, (1989) proposes that TQM isn't simply one more administration prevailing fashion; it is equipped for conveying genuine upper hand. The TQM approach incorporates the basic procedures and standards of value work organization, measurable control, and existing administration apparatuses in an organized way.

Concept of Productivity

The idea of productivity, by and large characterized as the connection amongst output and input, has been accessible for more than two centuries and connected in a wide range of conditions on different levels of accumulation in the monetary framework. It is contended that productivity is one of the essential factors administering monetary generation exercises, maybe the most vital one (Singh, Motwani and Kuma, 2000). Nonetheless, in the meantime as efficiency is viewed as a standout amongst the most fundamental components influencing a manufacturing organization's aggressiveness, employees' contend that productivity is regularly consigned to second rank, and disregarded or overlooked by the individuals who impact generation forms Motwani and Kuma, (2000); Kinnander and Gröndahl, 1999; Sink and Tuttle, 1989; Tangen, 2002). A noteworthy purpose behind this could be that numerous supervisors don't comprehend what the term efficiency really implies. Truth be told, efficiency is every now and again examined by managers however once in a while characterized, regularly misjudged and mistook for comparative terms, and at times estimated in a suitable route, prompting profitability being

ignored or even to that contra gainful choices are taken. As indicated by Koss and Lewis, surprisingly numerous managers who consistently settle on choices about enhancing plant effectiveness don't know how to answer the basic inquiry: "What do we extremely mean by productivity?" It additionally has all the earmarks of being a protection from tending to this inquiry (Koss and Lewis, 1993)

Measures of Productivity

Sales Growth

Growth is a process function which happens over multiple time periods. The growth of firm can be represented by the change of some variable over time. The most frequently used measures of growth are probably profit, physical output in natural units, sales in monetary units or market share (Delmar, 1997; Wiklund, 1998).

Organizational Change and Productivity

Change is the thing that presses us out of our customary range of familiarity and it is unavoidable (Sidikova, 2011). Kitur (2015) is of the view that change arrives in a firm in numerous structures: merger, acquisition, joint venture, new leadership, technology implementation, organizational rebuilding, and change in products or services consistence. The change might be arranged a long time ahead of time or might be constrained upon an association due to a move in nature. Firm change can be radical and modify the way an association works, or it might be incremental and gradually change the way things are finished. Change administration can be characterized as a style of administration that goes for urging associations and people to bargain adequately with the progressions occurring in their work. (Green, 2007). For change administration to be fruitful and its effect positive, directors or managers in the companies need to comprehend what spurs their group and select worker support.

Truth be told isolating administrators from authority as far as style is troublesome in light of the fact that each manager needs initiative abilities to complete exercises and each pioneer ought to have administrative aptitudes to incite labourers to change headings. This is particularly vital in associations or establishments which are experiencing change since consistent inspiration and rules are required for viability of worker functioning (McLagan, 2002).

In the worldwide market economy, innovation presentations, maturing boomer population, and under genuine world rivalry have all had an effect of progress administration. With the sudden economic stun in late 2008, numerous businesses raced to scale back their associations to catch conceivable benefits. In the present business condition, it's getting to be clear that nothing stays still (Olubayo and Johnson, 1994). He stresses that the rate of progress which business associations confront have kept on expanding increasingly over the most recent five decades. This is because of advances in data and correspondence innovation expanding democratization of economies and progression of economies over the globe. Manufacturing firms today work in such a focused domain and the need to embrace change is inescapable and should be talked about.

Change in Technology and Productivity

Companies today are productively incorporating new innovations to pick up an edge over others regarding productivity and services. With the assistance of innovation there are amazing changes in the procedures like marketing, production, human advancement. Technology is helpful in

precise decision making, time and cash sparing and so forth and the same is construct nowadays with respect to logical premise and investigation. In addition, it has assumed a noteworthy part in leading money related investigation and control.

In spite of the fact that, there are a few ramifications of technology, two ramifications have the most impact in firms today. Initial one is the computerization or new innovation and the other one is data innovation. New innovation' or robotization are not consistent words rather they cover an extensive variety of instruments, parts and frameworks (Sheridan, 2002). Robotization, data innovation or mix of both of these together is named as high innovation. Advances in interchanges innovation empowers firms to profit by the specialized aptitudes of workers around the world.

Present day generation systems utilize PC based innovation for incorporating different parts of manufacturing process in a superior and ad libbed way and furthermore permit snappy and cost proficient adjustments of any product. Technology can be liberating in empowering individuals to work now and again and in spots of their own picking. Innovation likewise can possibly rise above, land, social and worldly limits thus add joint efforts among firms and their individuals (Cartwright, 2003). The learning might be shared and circulated with this turbulent mechanical change. The electronic media is dependable to diminish the social parts of correspondence between the people cooperating. As the hardware has been intrusive, valuable and set up along these lines the prior connection amongst innovation and business might be changed. It is relied upon in future to have new foundation of firm conduct, another component of work, new model of creation of products and enterprises and another style of business (Rahmati, *e al.*, 2012). We hereby hypothesize as follows;

H₀₁: There is no significant relationship between change in technology and sales growth of manufacturing firms in Rivers State.

Total Quality Management (TQM) and Productivity

TQM centers around nonstop process change inside firms to give predominant client value and address client issues. TQM a famous rule for firm management is embraced for creating key data maps and data graphs for a data association (Clair, 1997; Cronin, 2000; Gregory, 2000). TQM can be characterized as an all-encompassing administration rationality that makes progress toward ceaseless change in all elements of a company, and it can be accomplished just if the aggregate quality idea is used from the obtaining of assets to client benefit after the sale. TQM rehearses have been archived broadly in estimation considers and in addition in the research that have researched the connection of TQM practices to different ward factors. TQM is an exertion that includes each firm in the business in the push to enhance performance. It pervades each part of an organization and makes quality a vital target. TQM is accomplished through an incorporated exertion among work force at all levels to build consumer loyalty by constantly enhancing execution. TQM centers around process change, client and provider inclusion, cooperation, and preparing and instruction with an end goal to accomplish consumer loyalty, cost viability, and deformity free work. TQM gives the way of life and atmosphere basic for development and for innovation headway.

Shank and Govindarajan (1994) and others contended sometime prior that quality practices had turned out to be important to the point that management accounting could never again disregard TQM. Customary accounting bolsters cost and production investigation, however

not quality examination Shank and Govindarajan (1994); Johnson, (1994). The push of the TQM theory is that quality and its administration must be worked in from the earliest starting point and that the achievement of value measures and change is the duty of everybody (Morgan and Murgatroyd, 1994; Lord, and Lawrence, 2001). We therefore hypothesize as follows;

H0₂: There is no significant relationship between total quality management and sales growth of manufacturing firms in Rivers State.

3. METHODOLOGY

The goal of the research was to examine the link between firm change and productivity of manufacturing firms in Rivers State. A causal research study of the quasi-exploratory plan is decided for this research. The decision of this study approach is on the grounds that it will deductively take a gander at the circumstance on ground and will experimentally investigate it absolutely to get result that can be ascribed to the available population. The available population of the investigation comprises of all the five hundred and forty seven (547) enlisted manufacturers in Rivers State. Nonetheless, with the guide of helpful inspecting systems, all components that constituted the sample estimate were 132 management staff from the 10 chosen manufacturing firms in Port Harcourt, Rivers State. (See Fig 3 below). An aggregate of 132 survey were regulated to respondents, and after recovery and information cleaning, one hundred and twelve (112) questionnaire were utilized for data analysis. The survey instrument depended on five-point Likert scale, which is determined as takes after; Strongly Agree (SA) = 5 point; Agree (A) = 4 points; Neutral (U) = 3 points, Disagree (D) = 2 points, and Strongly Disagree(SD)= 1. The spearman rank coefficient relationship was utilized for the research with the blend of inferential statistical apparatuses with statistical package for social sciences (SPSS) version 21.0 facilitating the analysis.

S/No.	Names of companies and addresses	Product Manufactured	No of Respondents
1	Air Liquide Nigeria Plc Plot 108, Trans Amadi Layout Port Harcourt	Industrial and medical gases and welding equipment.	12
2	Almarine Limited 28, Kolokuma street Borokiri Port Harcourt	Outboard engine Boats	9
3	Crocodile Matchets Nig, Ltd Plot 29, Trans Amadi layout Port Harcourt	Matchets	10
4	Eastern Bulkcem co. Ltd Rumuolumeni, Port Harcourt	Eagle cement	15
5	Eastern Enamelware Factory Ltd Plot 29, Trans Amadi Layout Port Harcourt	Household cooking utensils	14
6	Rivers vegetable Oil Co. Ltd Plot 80, Trans Amadi Layout Port Harcourt	Vegetable edible oil	16
7	General Agro Ind. Limited Plot 78/79, Trans Amadi Layout Port Harcourt	Edible vegetable oil and palm kernel pellets	8

8	First Aluminum Nig. Ltd Plot 19-21, Trans Amadi Layout Port Harcourt	Aluminum coils, sheets & circle collapsible	7
9	Nigeria Bottling Co. Plc Plot 126 , Trans Amadi layout Port Harcourt	Coca-cola, krest, Bitter lemon, sprite & Fanta	18
10	Nigerian Engineering Work Ltd Trans Amadi Layout Port Harcourt	Steel structure and pipes, pressure vessels,23 filling cabinets, cupboards, wardrobe, chairs and desk library shelving, storage shelving, industrial lockers and Fabrication.	
Total			132

Source: Members of Man Rivers/Bayelsa Branch, August, 2017

Fig 3: List of Selected Manufacturing Firms in Port Harcourt, Rivers State

4. ANALYSIS AND RESULTS

The investigation data was broken down in view of its point, to look at if there is a huge connection between these measurements organizational change (change in technology and total quality management) and the measures of productivity (Sales growth). The data from the investigation is appeared beneath while conclusion was made in view of the discoveries.

Table 1: Response of Respondents on Change in Technology

	Opinions	SA	A	U	D	SD	Mean \bar{x}	Total
		No %	No %	No %	No %	No %		No %
1	New technology will make it easy to get the system do what I want it to do	39(34.8)	38(33.9)	4 (3.57)	18 (16.07)	13(11.6)	3.64	112 100
2	Change in technology will take little mental effort to produce large quantity of product	50 (44.6)	44(39.3)	8 (7.14)	7 (6.25)	3 (2.68)	4.17	112 100
3	Acceptance of technological change will enhance and help facilitate our production process	39 (34.8)	33(29.5)	0 (0)	23 (20.54)	17(15.10)	3.48	112 100

Table 1 present's respondents' perspectives on change in technology as a measurement of organizational change with a mean estimation of $\bar{x} = 3.64$. To the first opinion, 34.8% of the respondents indicated strongly agree, 33.9% indicated agree, 3.57% were undecided, 16.07%

indicated disagree while 11.6% indicated strongly disagree. To the second view, a mean value of $\bar{x} = 4.17$ was obtained. 44.6% of the respondents showed firmly concur, 39.3% indicated agree, 7.14% indicated undecided, 6.25% indicated disagree, while 2.68% of respondents indicated strongly disagree. To the third feeling, a mean estimation of $x = 3.48$ was obtained 34.8% of respondents indicated strongly agree 29.5% indicated agree, 0% indicated undecided, 20.54% indicated disagree, while 15.10% indicated strongly disagree.

Table 2: Response of Respondents on Total Quality Management

S/N	Opinions	SA	A	U	D	SD	Mean \bar{x}	Total
		No %	No %	No %	No %	No %		No %
1	Our organisation develops a plan to achieve short-term goals effectively.	42 (37.5)	30 (26.8)	11 (9.8)	17(15.2)	12 (10.7)	3.65	112 100
2	Our organisation develops ways to measure the success of the TQM implementation.	62 (55.4)	26 (23.2)	6 (5.4)	12(10.7)	6 (5.4)	4.13	112 100
3	We aligned the TQM data with the business issues and organizational priorities effectively.	51 (45.5)	24 (21.4)	0 (0)	15(13.4)	22 (19.6)	3.59	112 100

Table 2 above represent respondents' opinion on total quality management as a dimension of organizational change with a mean value of $\bar{x} = 3.65$. To the first opinion in the table, 37.5% of respondents indicated strongly agree, 26.8% indicated agree, 9.8% indicated undecided, 15.2% indicated disagree, while 10.7% of the respondents firmly oppose this idea. To the second opinion, a mean value of $\bar{x} = 4.13$ was obtained 55.4% indicated strongly disagree, 23.2% indicated agree, 5.4% indicated undecided, 10.7% indicated disagree, while 5.4% of respondents indicated strongly disagree. To the third opinion, a mean value of $\bar{x} = 3.59$ was obtained 45.5% of respondents indicates strongly agree, 21.4% indicated agree, 0% indicated undecided, 13.4% indicated disagree. While, 19.6% of the aggregate respondents showed emphatically oppose this idea.

Table 3: Response of respondents on Sales Growth

S/N	Opinions	SA	A	U	D	SD	Mean \bar{x}	Total
		No %	No %	No %	No %	No %		No %

1	Introducing new ICT equipment in our organization will enhance our sales revenue	45(40.2)	36(32.2)	0 (0)	21(18.8)	10 (8.9)	3.76	112 100
2	Adopting high level machines in our production department will yield more sales return	49(43.8)	37(33.0)	5 (4.5)	14(12.5)	7(6.3)	3.96	112 100
3	Efficient use of our employees can help replace outdated method of production thereby increasing sales	51(45.5)	28(25.0)	14(12.5)	9 (8.03)	10(8.9)	3.90	112 100

Table 3 above represent respondents’ opinion on sales growth as a measure of productivity with a mean value of $\bar{x} = 3.76$. To the first opinion in the table, 40.2% of respondents indicated strongly agree, 32.2% indicated agree, 0% indicated undecided, 18.8% indicated disagree, while 8.9% of the respondents strongly disagree. To the second opinion, a mean value of $\bar{x} = 3.96$ was obtained 43.8% indicated strongly disagree, 33.0% indicated agree, 4.5% indicated undecided, 12.5% indicated disagree, while 6.3% of respondents indicated strongly disagree. To the third opinion, a mean value of $\bar{x} = 3.90$ was obtained. 45.5% of respondents indicated strongly agree, 25.0% indicated agree, 12.5% indicated undecided, 8.03% indicated disagree while, 8.9% of the total respondents indicated strongly disagree.

Hypothesis One

H0₁: There is no significant relationship between change in technology and sales growth

Table 4: Statistical Analysis for Hypothesis One

		Change in Technology	Sales Growth
Change in Technology	Correlation Coefficient	1.000	.845**
	Sig. (2-tailed)	.	.
	N	112	112
Sales Growth	Correlation Coefficient	.845**	1.000
	Sig. (2-tailed)	.	.
	N	112	112

** . Correlation is significant at the 0.01 level (2-tailed).

From the aftereffect of the above table, the correlation coefficient ($r = 0.845$) between change in technology and sales growth is extremely solid and positive. The coefficient of determination (r^2)

= 0.85) shows that 85% of sales growth can be clarified by change in technology. The huge estimation of ($p < 0.05$) uncovers a huge relationship. In view of that, the null theory was rejected. In this way, there is a noteworthy connection between change in technology and sales growth development of manufacturing firms in Rivers State. According to Cartwright, (2003). Modern production systems use computer based technology for integrating various aspects of manufacturing process in a better and improvised manner and also allow quick and cost efficient modifications of any product. Dauda and Akingbade (2011) additionally agree in his words that innovation significantly raises the productivity of workers alongside efficient. It enormously influences the workload on workers' and guarantees control over errors and cheats.

Hypothesis Two

H0₂: There is no significant relationship between total quality management and sales growth

Table 5: Statistical Analysis for Hypothesis Two

			Total Quality Management	Sales Growth
Spearman's rho	Total Quality Management	Correlation Coefficient	1.000	.766**
		Sig. (2-tailed)	.	.
	Sales Growth	N	112	112
		Correlation Coefficient	.766**	1.000
	Sales Growth	Sig. (2-tailed)	.	.
		N	112	112

** . Correlation is significant at the 0.01 level (2-tailed).

From the result of the above table, the correlation coefficient ($r = 0.766$) between total quality management and sales growth is exceptionally solid and positive. The coefficient of determination ($r^2 = 0.77$) shows that 77% of sales growth can be clarified by total quality management. The significant value of ($p < 0.05$) reveals a significant relationship. In view of that, the null hypotheses is rejected. Along these lines, there is a noteworthy link between total quality management and sales growth of manufacturing firms in Rivers State. Trent, and Monczka, (1999). Quality makes a value/esteem advantage over contenders as well as empowers the firm to charge a higher per/unit sale cost through separation. Doorman, (1980), likewise attest that organizations contending on quality seek after an operational methodology that controls nature of the product/service and looks for ceaseless change.

5. CONCLUSION AND RECOMMENDATIONS

Conclusion

Organizational change influences productivity in different measurements. This research tried to explore the impact of organizational change on productivity of manufacturing firms in Rivers State. Change in technology positively affect sales growth. PCs being the most accessible type of innovation around the world, it is broadly connected generally in manufacturing firms and numerous others as they will interface their self with the ICT world. Total quality management

likewise affected sales growth. Total quality management (TQM) is viewed as an imperative factor for the long haul achievement of an association. Quality is, actually, to a great extent a client observation in light of how well the product or services addresses the clients' issues and desires.

Recommendations

Following the discoveries and conclusions, the investigation made the accompanying proposals.

- i. Manufacturing firms' manager should be ready to adapt to new system modern way of production such as computer based machine that can help facilitate improvement in sales and optimum profit.
- ii. They ought to likewise soak up a culture of aggregate quality administration and re-prepare their staff towards the agreeableness of progress with a specific end goal to enhance the production and sales level.

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QUESTIONNAIRE

Please tick () or fill where appropriate.

SECTION A

RESPONDENT PROFILE

1. Name of Firm:
2. What is your sex: (a) Male (b) Female
3. Which of the following age brackets do you belong;
(a) Below 20 years (b) 20-30years
(c) 31-40years (d) 41-50years
(e) Above 50years
4. Educational Qualification:
(a) O/level (GCE, WASE, SSCE etc)
(b) OND/NCE/
(c) B.Sc/B.Ed/B.A
(d) M.Sc/MBA/M.A
(e) Ph. d
5. How long have you worked in this firm;
(a) 1 – 5years (b) 6-10years
(c) 11-15years (d) 16-20years
(d) Above 20years

SECTION B

Please tick () the most suitable option that described the situation in your firm.

SA (Strongly Agreed), A (Agreed), U (Undecided), D (Disagree), SD (Strongly Disagreed)

S/NO	ITEMS					
	ORGANIZATIONAL CHANGE					
	Change in Technology	SA	A	U	D	SD
1	New technology will make it easy to get the system do what I want it to do					
2	Change in technology will take little mental effort to produce large quantity of product					
3	Acceptance of technological change will enhance and help facilitate our production process					
	Total Quality Management (TQM)	SA	A	U	D	SD
4	Our organisation develops a plan to achieve short-term goals effectively.					
5	Our organisation develops ways to measure the success of the TQM implementation.					
6	We aligned the TQM data with the business issues and organizational priorities effectively.					
	PRODUCTIVITY					
	Sales Growth	SD	A	U	D	SD
10	Introducing new ICT equipment in our organization will enhance our sales revenue					
11	Adopting high level machines in our production department will yield more sales return					
12	Efficient use of our employees can help replace outdated method of production thereby increasing sales					