Leveraging Information and Communication Technology for Employee Productivity: A Study of Unique Leather Finishing Company Ltd. Kano State, Nigeria

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Abstract

The study broadly assessed the influence of Information Communication Technology (ICT) on employees' productivity with specific objectives. Data were obtained from 162 employees of the Unique Leather Finishing Company as a unit of analysis. The study adopted the survey research design where it employed quantitative method to derive information. The simple random sampling technique was adopted, which ensured that each element within the population had an equal chance of being represented. The study therefore measured the relationship between the independent variables and dependent variable. Descriptive statistics was used, while inferential statistics using Multiple Regression analysis was utilize to determine the regression coefficient in the hypothesis. The variables used for analysis were extracted from the questionnaire and the analysis was done using Statistical Package for Social Science (SPSS) version 26. The decision rules applied in this study were; Reject H_0 if P-value is less than or equal the level of significant = 0.05. Accept H_0 if P-value is greater than the level of significant = 0.05. We reject the null hypothesis 1 and 2 with the p-value of 0.031 and 0.000 respectively, which were statistically significant. Findings, among others showed that Information Communication Technology have a positive and significant impact on employee's productivity of Unique Leather Finishing Company Kano Nigeria. The study therefore recommended among others that: organizations need to build capacity for their human resources to enable them deploy ICT use optimally to gain competitive advantage for the organization.

Keywords: Information and Communication Technology (ICT), Employees Productivity, Organizations.

Introduction

Employees are measured as the most valuable asset of an organization because the success or failure of any organization is largely reinforced by its employees' productivity. Employees are required in organizations because their capabilities can fulfill a particular role in such organizations. The business environment is increasingly competitive, and firms are forced to advance their level of competencies and enlarge their capabilities to be more cost effective, creative, and competitive in the industry (Awan & Tahir, 2015). Organizations' ability to compete depends on their financial strength, tangible resources (financial, material, facilities, etc.), intangible resources (patents), technical know-how such as the Information and Communication Technology (ICT) and employees. The most tactical of these resources are human resources—employees, this is because they are the ones who act on the resources to ensure productivity and

achieve the organizational goals and objectives. Employees are considered the main support for a business or organization and most instrumental in its development (Ikpesu 2019). They are the most important tool and are an essential part of an industry through which productions are managed. Employees are responsible for the optimal use of all the industry's resources in achieving daily tasks and the broad goals and objectives of the organization (Olasanmi, Omotola & Olugbenga, 2021). Studies of Jibir, Abdu and Buba (2022), tried to analyze the determinants of organization's innovation in Nigeria, and issues affecting the productivity of employees in organizations in Nigeria (Olasanmi *et al,* 2021). This study assesses the impact of ICT on Employees productivity in Unique Leather Finishing Company Kano Nigeria.

The implementation of information and communication technology (ICT) in an organization is vital for the socioeconomic development of an economy, especially in developing countries Leaders of organizations incrementally use ICT-based electronic commerce to gain competitive advantage in the global marketplace as noted by (Kusuma, Muafi & Pamungkas, 2020). Despite the growth of ICT-based electronic commerce within organizations businesses in developed countries, the rate of ICT adoption within small organizations, firms or businesses in developing countries has remained relatively low in some quotas (Napitupulu *et al*., 2018). The low adoption rate of ICT by Small organizations or firms' leaders in developing countries such as Nigeria has contributed to a low rate of employees' productivity towards achieving the organizational goals and objectives (Okundaye, Fan & Dwyer, 2019). Even though the growth in ICT adoption within both large and small organizations in the country had been significant lately, this has contributed to about 20.32% of Nigeria's GDP in the third quota of 2022, which is the highest in five years (NBS 2023 in Awe *et al,* 2023).

The usage of ICT is an integral part of innovation and growth in a dynamic economy; thus, have a vital role in the ensuring employees' productivity in an organization (Lamido, Bogoro & Ahmad, 2022). Innovation in ICT has contributed to the improvement of organizational overall performance and the achievement of competitive advantage for organizations within developed and developing countries through increased employee productivity. Global competitiveness and the need to stimulate growth are compelling reasons why leaders of companies need to adopt ICT (Niebel, 2018).

However, given the enormous potential of ICT use in the developed countries of Europe, U.S., Japan and China to impact on organizational innovation and assist in designing new products, manufacturing quality products that have high flexibility, reduce time (for products) to market and help to achieve competitiveness at the national and global market, It becomes imperative for companies to integrate ICT use in their operations for promotion of healthy competition in the industry (Banga & Velde, 2018). These reasons motivate us to research into the impact of ICT on employees' productivity in Nigeria, using the Unique Leather Finishing Company Kano Nigeria. This research is hinged therefore on the premise of two aspects of ICT, namely: selection and use of digital tools and construction and exchange of ideas and solutions.

The study therefore came up with the following research questions: a. How selection and usage of digital tools in the ICT stimulate employees' productivity in the Unique Leather Finishing Company Limited, Kano Nigeria? b. Does construction and exchange of ideas and solutions in the ICT influences employees' productivity in the Unique Leather Finishing Company Limited, Kano Nigeria?

The study broadly seeks to assess the impact of Information Communication Technology (ICT) on employees' productivity with the following specific objectives: a. To assess the impact of selection and usage of digital tools in ICT on employee's productivity of Unique Leather Finishing Company Limited, Kano, Nigeria; b. To evaluate how construction and exchange of ideas and solutions in ICT influenced effective communication of Unique Leather Finishing Company, Kano, Nigeria. Hypotheses tested for the study are:

H0i: Selection and usage of digital tools in the ICT has no significant impact on employees productivity of Unique Leather Finishing Company, Kano Nigeria;

H0ii: Construction and exchange of ideas and solutions in the ICT has no significant influence on employees' productivity of Unique Leather Finishing Company, Kano Nigeria.

Literature Review

Employees Productivity

Productivity is a concept commonly defined as the relation between output and input, which has been practical in diverse circumstances on various levels for over two centuries. The International Labour Organization has defined productivity as the ratio connecting the output and input of resources used up in the production process (Hanaysha, 2016). Olasanmi *et al* (2021) described productivity as the creation of goods and services in large quantities and the application of factors of production to yield positively. Productivity is the total output/total amount of input, which shows the link between the unit of labor input and output (Ewuim, Igbokwe-Ibeto & Nkomah, 2016). From a business perspective, productivity is viewed in terms of individual industries or firms and the extent to which employees apply the productivity concept to their jobs, while some see the concept as a measure of the efficiency level achieved in production. Employee productivity is very important for the success of a company in today's globally competitive market. The ability of an employee in an organization to maximize available resources to produce cost-effective goods or services has many advantages. These involve timeliness, discipline, coordination, analysis, and highly skilled manpower (Sexton *et al*, 2018).

It can be deduced therefore, that organizations, firm's or company's performance is tied down to the amount of input exerted by employees into the production or service process that determines the output of the organization. Been more productive by employees means better performance by such an organization. This entails the entire organization is hinged to employee's productivity, which is pivotal to the entire organizational success.

Information and Communication Technology (ICT) on Employees Productivity

For over two decades, information has been seen as a valuable resource along with other factors of production. Following the expansion of business activities, globalization, and rapid changes in the organizations' environment, information is considered as a strategic factor to the extent that today it is seen as a powerful tool in dealing with environmental problems and challenges as well as a tool that makes proper use of opportunities. Accordingly, the establishment of an appropriate information system using ICT for collecting, processing and storing of data is of vital importance. Although ICT and the use of computer have never replaced for human decision making, their power to help managers and employees to make the right decisions using accurate information and speeding up tasks cannot be neglected. Many organizations have realized the importance of information and communication technology and its impact on speeding up and accurate performance of tasks and increasing customer satisfaction, support systems, managers' decision-

making, and especially the organization's effectiveness. Such awareness has caused most organizations to quickly move towards the application of ICT (Salahshour *et al,* 2018).

ICT refers to methods of producing and collecting information. ICT makes data accessible to anyone from everywhere by making computer programs smaller, cheaper, more applicable, and simpler to the extent possible (Strohmeier, 2013). Databases, created based on the idea of ICT, simplify complex informational processes within the organization, create organizational networks by connecting organizations together, and change managers' midterm perspectives into long-term ones. In general, the concept of information technology covers the following components: Culture of producing information, information-orientation, collecting, summarizing, and analyzing data, informational sensitivity, processing, network thinking, optimization, integration, and research-orientation, method-building, storing, and transmitting information. These qualities of ICT aid and increase the employee productivity of an organization towards achieving its goals.

Empirical Review

The study has reviewed the works of some scholars as they relate to ICT and employees' productivity world over. Olasanmi *et al* (2021) studied the Determinants of Employee Productivity in Listed Manufacturing Firms in Southwestern Nigeria. The study analyzed the level of employee productivity and identified factors influencing employee productivity in listed manufacturing firms in southwestern Nigeria. The descriptive survey design was adopted for this study. A sample of 394 respondents was selected using a simple random sampling technique. Data collected using a structured questionnaire was analyzed using descriptive and inferential statistics. The study showed that majority of the respondents (58.33%) had average productivity levels. Results further revealed that management and organizational factors had the greatest influence on employees' productivity, followed by organizational/technical factors, and then production and finance factors. In addition, results indicated that financial (B = -1.322, p = 0.000), management (B = -2.751, p = 0.000), personal (B = -2.721, p = 0.000), and organizational factors (B = -3.140, p = 0.000) all had significant and negative influence on workers' productivity. The study concluded that financial, management, personal, and organizational factors were potent factors that could define workers' productivity.

Abishek *et al* (2021) studied the Impact of Information and Communication Technology in Human Resource Management. In their study, they see Information and communication technology as the internet services combined with computers for the unified use of technology. Information and communications technology (ICT) is often used as an extended synonym for information technology (IT), but is a more specific term that stresses the role of unified communications and the integration of telecommunications (telephone lines and wireless signals), computers as well as necessary enterprise software, middleware, storage, and audio-visual systems, which enable users to access, store, transmit, and manipulate information It is based on a survey of 65 employees. The survey concluded that ICT improves the efficiency, innovation reduces the time help in easier functioning of the organisation.it improves the performance of the employee.it helps to reduce the work time. The sample size was reasonably well.

Egwakhe *et al* (2020) studied the influence of technology transfer on labour productivity using multiple regression analysis in Nigerian automobile industry. The study found a positive significant relationship between technology transfer and labour productivity in Nigeria. However, Leo (2016) tried to discuss the theoretical aspect of ICT development and its impact on labour productivity and economic growth. The study found theoretically that ICT development led to

increase in labour productivity both in the sectors producing ICT and in sectors using ICT. The study however did not find any correlation between ICT developments and labour productivity in some of the high and medium productivity countries in the European Union (EU). In five out of six countries with medium productivity and all the low productivity countries in the EU, ICT (fixed broadband internet subscription had significant impact on labour productivity.

Okundaye *et al* (2019) as well researched on the Impact of information and communication technology in Nigerian small-to medium-sized enterprises. Their research was on the premise of how small-to medium-sized enterprise (SME) leaders in Nigeria use information and communication technology (ICT) adoption as a business strategy to increase profitability and compete globally. Design/methodology/approach is that the participants for the study consisted of executive-level SME leaders who had the authority to approve ICT implementation within their respective organizations. Individual interviews were undertaken with participants to gain an understanding of their experience of determining the merits of and implementing ICT. The technology acceptance model, which specifies the relationship between perceived usefulness, perceived ease of use, attitude toward computer use and intention to use technology, was applied as a framework to explain the Nigerian SME's ICT adoption strategies. Findings of the study consist four major themes emerged from the data analysis: ICT adoption factors, ICT roles and benefits, role of government and SME success factors. The findings from this study contribute to the knowledge base regarding factors that affect ICT adoption by SME leaders as a business strategy to increase profitability and compete globally, particularly within SMEs in Lagos, Nigeria. It further addressed the gap in existing literature regarding other factors such as the influence of culture on ICT adoption, cost of ICT implementation, available ICT skills, infrastructure and ICT knowledge gap as the primary impeding factors of ICT adoption in Nigerian.

Rezaei *et al* (2014) researched on The Effects of Information Technology (IT) on Employee Productivity in Shahr Bank (Case study of Shiraz, Iran). The main objective of the study was to examine how IT affects the productivity of human resources. Based on a review of theoretical background and the literature and exploratory interviews with the participants, eight indices of human resources productivity were identified in the study, including motivation, creativity and innovation; spirit of competitiveness, activity cost reduction, the improvement of the quality of activities, work time reduction, job satisfaction, and human resources spirit. Results suggested that that there is a positive relationship between IT and human resources productivity. The study concluded in its findings that ICT has impacted positively on productivity of human resources.

In conclusion, findings from the reviewed studies are lacking in applying the aspects of ICT that could impact on the productivity or performance of employees in an organization, which this current study tends to bridge that gap. The approach adopted by this study is the application of the two aspects of ICT: i. Selection and usage of digital tools in the ICT as well as ii. Construction and exchange of ideas and solutions in the ICT as precursors to see how it impact on employees' productivity.

Theoretical Framework

The theoretical relationship between ICT and employee's productivity has its roots in the early work of Joseph Schumpeter ''Capitalism, Socialism and Democracy.'' Schumpeter's principles of 'creative destruction' envisaged a product and process innovation systems (ICT inclusive) in which new production units or products replaces the old or outdated ones in an economy. This process of creative destruction does not only imply harnessing new technologies, but also

developing new business models and exploiting old technologies in a new way (Tafor, 2020). The work of Njoh (2018) added to the modern theory of economic growth because it sees growth arising from technological progress. Growth was determined by forces that are external to the economy. In the Neo-Classical theory, the aggregate production function is expressed as a function of factor inputs such as labour, capital, land, technology etc (Olalekan, 2012). This was contrary to the new growth theory that postulated that economic growth is endogenously determined within the economy. The new growth theory emphasized the role of technological innovations, knowledge and human capital investment in achieving economic growth.

These Neo-classical theories could not explain better how the public sector could achieve higher productivity and economic growth. For instance, the Keynesian economist may regard technological innovations or progress, human capital investment and acquisition of knowledge arising from government spending or interventions. Government intervention or spending appears to be crucial determinant of public sector performance or productivity growth. Although Keynesian economics did not explicitly recognize the role of technological innovations, it implicitly acknowledged it via government investment spending. Therefore, Keynesian economics is destined to lead public policy in most economies of the world because of its effectiveness in stimulating aggregate demand in all sectors of the economy.

However, Government spending alone in the public sector may not generate the desired results, the diffusion of technological innovation is crucial in ICT penetration of the public sector in Nigeria. Everett Rogers in 1962 tried to explain how technological innovations spread or diffuses from one section of the population to another over time. The adoption and usage of ICT diffuses in all sectors before their full impact are felt on the entire economy. However, the diffusion of innovation theory remains a social theory that may be subjective concerning the impact of ICTs on employees' productivity growth. According to Qiang *et al* (2004), there are three channels through which ICT can influence economic growth, namely total factor productivity growth in sector producing ICT, capital deepening and total factor productivity growth through reorganization and ICT usage.

This study also reviewed the Technology Acceptance Model (TAM) as a framework to explain the ICT aspects on employees' productivity in Nigeria. The TAM specifies the relationship between perceived usefulness, perceived ease of use, attitude toward computer use, and intention to use technology.

Theoretical Underpinning

The TAM is an established theoretical model used to explain and predict user behavior toward ICT, where perceived usefulness is one of two causal antecedents of adoption and use of new technology. The TAM is the most significant extension of Ajzen and Fishbein's theory of reasoned action (TRA). The strength of TAM is that it replaced and expanded on many of the TRA measures of attitude with just two technology acceptance measures: perceived ease of use and perceived usefulness. The TAM also has roots in the theory of planned behavior (TPB), which is a modification of the TRA and emphasizes the measures of intention to use technology (Liu, 2019). The TAM has been the most robust theory used in studies to explain user acceptance of ICT. The most appropriate framework for analyzing the impact of ICT on employees productivity toward making decisions on ICT aspects adoption, which was appropriate for exploring the effect of different factors, including culture, on the perceived usefulness and perceived ease of use of ICT, particularly among employees in Nigeria.

Methodology

Research design is the plan, structure and strategy of investigation that guides the collection and analysis of data in any research. It is against this background that the study adopted social survey research design where the study employed quantitative methods to derive information. The population of the study is 280 employees drawn from the study area. With regard to the characteristics of the study population and considering the size of the population where respondents were drawn to complete questionnaire, the study drew a sample size using Krejcie and Morgan (1970) method of determining sample size for research activities. In the Krejcie and Morgan (1970) method, no calculation is needed. In view of this, the value on the table for population of 280 is S=162. This means the sample size for this study was 162.

The proportion of questionnaires to be administered for each division is given below:

Table 1. Proportional distributions of questionnaire respondents

Source/Division	Total Population	Proportional Sample
Crust	24	13.9=14
Selection	20	11.6=12
Maintenance	30	17.4=18
Tanning	5	2.9 =3
Raw skin	9	5.2 =5
Buffing	47	27.2=27
Chemical store	2	1.2 =1
Stocking and liming	4	2.3 =2
Trimming	4	2.3 = 2
Setting out	3	1.7 = 2
Fleshing	4	2.3 = 2
Vacuum	5	2.9 = 3
Rizzi setting	13	7.5 = 8
Hanging	4	2.3 = 2
Toggling	27	15.6=16
Rettaning	10	5.7 =6
Shaving	18	10.4=10
Finishing	4	2.3 =2
Senior management staff and administration	47	27.2=27
Total	**280**	**162**

Source: Field Survey, (2024).

Note: Each division sampled is approximated to a whole number for easy questionnaire administration. Therefore, the total questionnaire arrived at is 162.

Note: The administered questionnaire is proportionate to the total population of the entire employees (see Table 1).

Sampling Techniques and Procedure

Simple random sampling technique was adopted. According to Creswell (2013), simple random sampling technique ensures that each element within the population has an equal chance of being represented i.e. each element has an equal probability of being represented. To this end, any employee of the Unique Leather Finishing Company working in any of the divisions as mentioned above, who was willing to respond to the study questionnaire was sampled. This means every employee of the company had the probability of being sampled.

Measurement of Variables

The study therefore measured the relationship between the independent variables as Selection and usage of digital tools in the ICT as well as Construction and exchange of ideas and solutions in the ICT in Unique Leather Finishing Company, Kano, State Nigeria. Descriptive statistics such as frequency counts percentages were used, while inferential statistics using Multiple Regression analysis was used to determine the type of regression coefficient between the variables in the stated hypothesis.

Research model:

$Y=Bo+b_1x_1+b_2x_2+ʊ$

Y=Dependent Variable (Employee Productivity)

Bo= Constant of Regression (b_1, b_2)

b= Slope of the Regression

X= Independent Variables (x_1= Selection and usage of digital tools in the ICT and x_2= Construction and exchange of ideas and solutions in the ICT)

ʊ= Random error term (Residual)

Validity of the Research Instrument

Validity refers to the extent to which data to be collected are relevant to the problem which the study intends to address. In terms of face validity, content and construct validity, the validation of research instruments for this study was carried out by two (2) persons knowledgeable in the area of research.

Reliability of Research Instrument

To this effect, reliability of the instrument was obtained by employing the Cronbach's Alpha coefficient measure of the internal consistency of the instrument on the questionnaire administered on respondents. A reliability coefficient (alpha) is higher than or equal to 0.7 considered as acceptable or reliability. Therefore, the reliability test accomplished that all the items of the pilot questionnaire on 25 items is reliable since the scores of the test was higher than 0.7 given at .83. Hence, the responses generated for all of the variables used in this research were reliable enough for the data analysis since the value exceeds 0.70 (Sekaran 2010).

The decision rules applied in this study are;

- Reject H_0 if P-value is less than or equal the level of significant = *0.05*.
- Accept H_0 if P-value is greater than the level of significant = *0.05*

Result of the Findings

Based on the sample size for the study as indicated in Table 1, a total of one hundred and sixty two (162) copies of the questionnaire were administered on respondents in the Unique Leather Finishing Company Ltd.

Table 2. Distribution and return of questionnaires

Category of respondents	Questionnaire administered	Questionnaire returned	% returned	Questionnaire duly filled	% duly filled
Employees	162	138	85.2%	135	83.3
Total	162	138	85.2%	135	83.3

Source: Field Survey (2024).

The distribution and return of questionnaire shown in Table 2 above one hundred and sixty two questionnaire (162) were administered, one hundred and thirty five (135) were returned, having a percentage of 83.3%. This implies that the analysis of the data collected was based on 135 copies of the returned questionnaire.

Socio-Economic Characteristics of Respondents

Table 3. Socio Economic Profile

1.	**Age**	**Frequency**	**Percentages**
	18-25 years	47	35.0%
	26-35 years	65	48.0%
	36-45	21	15.0%
	46-above	2	2.0%
	Total	**135**	**100.0%**
2.	**Sex**	**Frequency**	**Percentages**
	Male	95	70%
	Female	40	30%
	Total	**135**	**100.0%**
	Marital Status Responses	**Frequency**	**Percentages**
3.	Married	98	73.0%
	Single	34	25.0%
	Widowed	1	0.7%
	Divorce	2	1.5%
	Total	**135**	**100.0%**
	Educational Qualification Responses	**Frequency**	**Percentages**
4.	Primary	11	8.0%
	Secondary	20	15.0%
	Tertiary	104	77.0%
	Others	0	0%
	Total	**135**	**100.0%**

Source: Field Survey (2024)

Table 3 item 1, depicts the age distribution of respondents as shown, 47(35%) are within the age of 18-25, 65 (48%) are within the age range of 26-35, 21 (15%) are within the age of 36-45 and 2(2%) are above 46 years of age. The age distribution of the respondents shows that about 98% of the respondents fall within the age bracket of 18-46. This shows most of the employees are within youthful and productive age brackets due to the nature of the Job. Item 2 above shows the sex distribution of respondents 95 (%) are male, while 40 (%) are female. This simply means majority of the respondents are males.

Item 3 in Table 3 above indicates the marital status of the respondents. The table revealed that 98 (73%) of the respondents were married, 34 (25%) were single. Further, 1(0.7%) were widowed and 2 (1.5%) were divorced. Item 4 in the table depicts 11(8.0%) of the employees are primary school leavers, 20 (15.0%) are secondary graduates, 104(77%) are Tertiary institution graduates from various institutions in Nigeria.

Presentation and Analysis of Regression Results

The regression results are presented in the tables below:

Table 4. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin Watson
1	.840[a]	.706	.703	1.867	1.901
Predictors: (Constant): Selection and usage of digital tools in the ICT; Construction and exchange of ideas and solutions in the ICT. Dependent Variable: Employees Productivity					

Source: SPSS Output (2024)

Table 4 shows summary of the regression result. The R square (R^2) value of 0.706 indicates that 70.6 percent (%) of the variations in employees' productivity are explained by variations in Selection and usage of digital tools in the ICT; Construction and exchange of ideas and solutions in the ICT. Similarly, R square adjusted value of 0.703 indicates that 70.3% of variation in the dependent variable is accounted by variation in the independent variable, all things been equal. The Durbin-Watson statistics which is employed to check for autocorrelation recorded 1.901 as its value which is within the acceptable threshold. This shows that the variables used in the model are not auto-correlated and are therefore, reliable for predictions.

Table 5. ANOVA[a]

ANOVA[a]						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	3704.657	5	630.931	268.832	.000[a]
	Residual	1659.822	157			
	Total	5364.479	162			
a. Dependent Variable: Employees productivity						
b. Predictors: (Constant): Selection and usage of digital tools in the ICT; Construction and exchange of ideas and solutions in the ICT						

Source: SPSS Output (2024)

Table 5 indicates that the F-test which tests the overall significance of the model recorded a value of 268.832 with a probability value of 0.000 which is statistically significant at 0.05 levels. This indicates that Selection and usage of digital tools in the ICT as well as Construction and exchange of ideas and solutions in the ICT can collectively explain the variations in Employee Productivity. This indicates that Selection and usage of digital tools in the ICT as well as Construction and exchange of ideas and solutions in the ICT has significant impact on the employees' productivity of Unique Leather Finishing Company Ltd. Kano Nigeria.

Testing of Hypotheses

Two hypotheses were formulated for the study and the variables relating to the hypotheses were measured with multiple items which were consolidated through scale summation before using them to test the hypotheses. The hypotheses were tested using t. and sig. values in the coefficient of the regression result. The results are presented in the table below:

Table 6 Regression Result

Model	Unstandardized Coefficients		Standardized Coefficients	t.	Sig.
	B	Std. Error	Beta		
1.(Constant)	13.024	1.158		11.335	.001
Digital tools	.079	.028	.138	2.332	.031
Exchange of ideas	.176	.044	.326	4.175	.000
Information research	.317	.049	.676	6.460	.000
Investigation of Problems	.574	.055	.392	10.228	.000
Dependent Variable: Employees Productivity					

Source: SPSS Output (2024)

Test of Hypothesis One

H0: Selection and usage of digital tools in the ICT has no significant impact on employees' productivity of Unique Leather Finishing Company, Kano Nigeria;

H1: Selection and usage of digital tools in the ICT has a significant impact on employees' productivity of Unique Leather Finishing Company, Kano Nigeria;

Selection and usage of digital tools in ICT recorded a t-statistics value of 2.332 with a sig. value of 0.031, statistically significant at 0.05 level of significance. We reject the null hypothesis and accept the alternative hypothesis. This implies that there is a significant impact of selection and usage of digital tools of the ICT on employees' productivity. It implies an increase in the selection and usage of the ICT digital tools, leads to increased employees productivity in the Unique Leather Finishing Company, Kano Nigeria.

Test of Hypothesis Two

H1: Construction and exchange of ideas and solutions in the ICT has no significant influence on employees' productivity of Unique Leather Finishing Company, Kano Nigeria.

H2: Construction and exchange of ideas and solutions in the ICT has a significant influence on employees' productivity of Unique Leather Finishing Company, Kano Nigeria.

Construction and exchange of ideas and solutions in ICT has a t-statistics value of 4.175 with an alpha value of 0.000 which is statistically significant at 0.05 level of significance. We reject the null hypothesis and accept the alternative hypothesis. This implies that construction and exchange of ideas and solutions in ICT has a significant positive impact on employees' productivity. Impliedly, the construction and exchange of ideas and solutions in the ICT leads to greater employees' productivity towards achieving the goals and objectives of the organization.

Discussion of Findings

The broad objective of this study is to examine the impact of Information Communication Technology (ICT) on employee productivity using the case of Unique Leather Finishing Company Kano Nigeria. Based on the previous empirical studies, the general findings obtained from the hypotheses testing were discussed as follows:

From the analysis of hypothesis, it is glaring that Information Communication Technology has a positive significant impact on employee's productivity of Unique Leather Finishing Company Kano Nigeria. Going by the result, the aspect of the ICT that involves digital tools such as Computer aided design (CAD) to develop new products*;* Computer aided manufacturing (CAM)

to produce quality products*;* Supply Chain Management (SCM) to manage supply activities from raw materials through finished goods to end use*;* Enterprise Resources Planning (ERP) to integrate all business functions so as to reduce data duplication*;* Product Development Process (PDP) to monitor production of quality goods*:* Resource Planning System (RPS) for efficient resources utilization at the operational section*;* Radio Frequency Identification (RFI) to track the flow of raw materials all the way to the end users. No doubt aid in the increased employees' productivity in Nigeria, using the unique leather finishing company Ltd as a case microcosm. This overall, act on a better output as well as outcome for the company through effective information technology.

More so, the analysis of hypothesis two, shows that Information Communication Technology have a positive significant impact on employee's productivity in Nigeria, with a working firm as the Unique Leather finishing company Kano. It shows that information technology influences and encourages Internet to facilitate easy communication among employees within the company*;* Internet to place order for her products*;* Internet to receive orders for products*;* Internet to search for information about new products designs*;* Internet to search for information about competitors*;* Organizational website to showcase her products*;* Social media to advertise her products*;* Management Information System (MIS) for information flow within the organization*;* Customer Relationship Management (CRM) to gather intelligence information about customer preferences*;* Closed circuit television (CCTV) to monitor employees' activities for improved quality services.

The findings of this study therefore are in line with the works of Egwakhe *et al* (2020), Abhishek *et al* (2015), Dimelis and Papaioannou (2015) in Leo (2022) among others. As the authors concluded that the components of information communication technology impacts positively on employees' productivity, in terms of better input, process of production as well as output of the firm, leading to a better outcome or goal, ensuring attaining organizational profitability.

Conclusion

At the heart of any research, it has always been to find solutions to problems. Therefore, in line with the findings of this study, the study concludes and recommends that Managements of organizations should also adopt ICTs that can support product development and resource planning to enhance better employees' productivity; In addition, organizations need to build capacity for their human resources to enable them deploy ICT use optimally to gain competitive advantage for the companies prompt knowledge of new technologies and development should be adapted by the owners/managers of firms as it will go a long way in enhancing the quality of goods and services. Whenever, there are changes in technology, firms should always ensure that they are in tune with them. This will make the firms to perform more effectively and achieve their goals.

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Appendix 1: Krejcie and Morgan Table

Table for Determining Sample Size of a Known Population

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	346
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	354
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	191	1200	291	6000	361
45	40	170	118	400	196	1300	297	7000	364
50	44	180	123	420	201	1400	302	8000	367
55	48	190	127	440	205	1500	306	9000	368
60	52	200	132	460	210	1600	310	10000	370
65	56	210	136	480	214	1700	313	15000	375
70	59	220	140	500	217	1800	317	20000	377
75	63	230	144	550	226	1900	320	30000	379
80	66	240	148	600	234	2000	322	40000	380
85	70	250	152	650	242	2200	327	50000	381
90	73	260	155	700	248	2400	331	75000	382
95	76	270	159	750	254	2600	335	1000000	384

Note: N is Population Size; S is Sample Size *Source: Krejcie & Morgan, 1970*

Note: N=Population size,

S=Sample size,

Source: Krejcie and Morgan, 1970