

## Technological Acceptance & Efficiency Of Small And Medium Enterprises In Kwara State

By

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### ABSTRACT

*The widespread adoption of Information and Communication Technology (ICT) by Small and Medium-Sized Enterprises (SMEs) has ushered in a new era of business visibility and competitiveness. SMEs can leverage technology, such as social media and email communication, as powerful marketing tools to gain a competitive edge. While large corporations have inherent advantages in terms of human and financial resources, SMEs can level the playing field by reaching a broader audience through the effective use of ICT. This study explores the impact of technology acceptance on the efficiency and performance of small and medium enterprises (SMEs) in Kwara State, Nigeria. A quantitative research design was employed, utilizing a structured questionnaire as the primary data collection tool. The sample comprised 127 SMEs operating in the production, retail, and other sectors within Ilorin, Kwara State. The list of registered SMEs was provided by the Small and Medium Enterprises Development Agency of Nigeria (SMEDAN). Out of the 127 questionnaires distributed via social media platforms such as WhatsApp, 80 valid responses were received and analyzed, representing a response rate of 63%. The decision to use a quantitative research method was driven by its ability to capture a wide range of perspectives from respondents, providing a comprehensive understanding of the factors influencing technology acceptance among SMEs. The study's findings reveal that the acceptance and utilization of technology significantly enhance the operational efficiency and performance of SMEs, explaining 66% of the variance in efficiency. The research highlights the significance of technology acceptance among SMEs. Factors such as perceived usefulness, perceived ease of use, and management support play crucial roles in driving ICT adoption and utilization. The study therefore recommends that SMEs should invest in capacity building and training programs to equip their employees with the necessary skills to effectively utilize ICT. This will help ensure that technology is implemented and utilized effectively.*

**Keywords:** Efficiency, Technology acceptance, ICT Adoption, SMEs

### 1.1 Introduction

The advancement in businesses globally has led to an increased role for Information Communication Technology (ICT), significantly influencing the operations, competitiveness, and general performance of various ventures. Suleiman, Aliyu and Bello (2021) argued that the sustainable development of developing countries like Nigeria depends largely on the performance of their indigenous micro, small and medium scale enterprises (MSMEs) and these enterprises are generally considered as the engine of economic growth as a result of their immense

contribution towards employment generation, poverty reduction, export earnings and gross domestic product

Small and Medium-sized Enterprises (SMEs), in particular, play a crucial role in generating employment worldwide, driving economic prosperity, and fostering creativity and innovation (Salau et al., 2024). As ICT continues to evolve, its integration into SMEs has become essential for determining progress and sustainability. Through ICT, SMEs can reach a broader audience, which would have been

difficult using traditional methods, and they can achieve this in a much shorter time frame (Aze et al., 2022).

Devkota et al. (2022) argue that beyond job creation, SMEs also drive innovative ideas, develop new business models, address challenges related to the balance of payments, reduce inflation, and minimize poverty and social income inequality. The global acceptance of ICT by SMEs has ushered in a new era of business visibility and competitive advantage. By leveraging technologies like social media and email marketing, SMEs can enhance their market presence and customer outreach. While large corporations are naturally at an advantage due to their control over human and financial resources, the adoption of ICT enables SMEs to tap into a wider audience, leveling the playing field in many respects.

The integration of ICT into business operations does not imply a complete rejection of traditional methods. Instead, it marks a shift towards more modern approaches, where the online community offers access to a vast audience within a short period. ICT innovation has significantly increased organizational performance, providing leverage for companies in both developed and developing countries (Niebel, 2018). To justify the efficiency of ICT integration into SMEs, statistics show that globally, SMEs account for approximately 90% of businesses and 50% of employment (World Bank, 2020). In developing economies, SMEs contribute up to 40% of

national income. Specifically, in Nigeria, the use of ICT among SMEs has increased their market reach by over 60% within a decade, leading to higher profitability and improved competitiveness (SMEDAN, 2021).

A lot of research has been done in the ICT field and SMEs efficiency, such as the impact of ICT acceptance on SMEs performance and other researchers have tried to establish the factors that influence the adoption of ICT by SMEs. Khairuddin and Olowosuyi, (2020) added that majority of these studies were conducted in advanced countries, while few were carried out in countries still undergoing development in Africa like Nigeria. Continuous changes in the technological sector is one of the constraining factors. Igwe *et al.*, (2020) stated that a lot of the studies done on ICT adoption in the manufacturing sector of developing countries were carried out on large firms. Various studies have showed that factors like inadequate governmental support, inadequate support by financial institution, inadequate infrastructures, inadequate ICT skills and managerial knowledge limits the adoption of ICT by SMEs.

The study examines the effect of technological acceptance on the efficiency of SMEs in Kwara State, Ilorin metropolis, while considering the following variables; perceived ease of use under the dependent variable, and efficiency under the independent variable. Kwara State is an emerging economy with a growing SME sector, making it an ideal location to study the impact of ICT on business performance. The study adopted the

dependent variables because it provides a framework to understand some of the factors that influence SMEs (owner/managers) decision to adopt technologies. The study adopted perceived ease of use as a dependent variable because it provides a framework for understanding some of the factors that influence SMEs (owners/managers) decisions to adopt technologies. Efficiency, as an independent variable, measures the SMEs' ability to accomplish tasks and achieve meaningful results in a timely manner with a high level of quality.

The study will focus on SMEs in the following sectors; production, retail and other sectors of the state within the duration of 2022 to 2024 (two year), the owners/managers of the entities will represent the population from which the sample audience for this study will be selected. A two-year time frame ensures that the data collected is relatively recent, providing a more accurate snapshot of the current state of SME technology adoption and performance. The reason for this is, owners/managers of SMEs are the key decision maker and policy implementer, they desire the direction the entity will go and how long it will go in that direction, they are the overseer and if any structural decision will be made it will have to come from them.

### **1.2 Research Questions**

In what way has the ease of technology acceptances affect the efficiency of small and medium enterprise in Kwara State?

### **1.3 Research Hypotheses**

perceived ease of use of technology does not significantly affect the efficiency of small and medium enterprise in Kwara State.

### **2.1 Literature Review**

Efficiency is measured by achieving a goal on time within the estimated budget (Forsman, 2008). Devices like the Internet, photocopier, mobile phone, laptops and fax machines are the major tool used by self-employed SMEs, these tools are more available and common due to the high growth rate in the technological factor (Omoneye, 2019). It is important to note that these tools are the bed rock on which a lot of businesses rely for efficient running of the business activities. These tools are used to access information and provide services to customers in an efficient manner regardless of distance. Razumovskaia *et al.*, (2020) also stated that the combination of business activities can result to efficiency, further studies have showed that SMEs efficiency has a strong link with national economic development and the wellbeing of the people.

Johansson *et al.*, (2017) stated that the adoption of the right technology can have a great effect on SMEs efficiency, examples of such technologies are: internet protocol, email, e-commerce, mobile phone technology and social media, enterprise resource planning, and other automated tools can promote data management process, decision making process, information delivery time and SMEs efficiency. Studies shows that SMEs that adopt ICT are able to reduce the cost of getting

information across while increasing customer's satisfaction, productivity and efficiency. Fast, quick and accurate information system stimulate effectiveness and efficiency of an SMEs (Onileowo and Fasiku, 2021).

The adoption of ICT element like computer reduces the need for hard copies like papers and records that may take time to prepare, space will be saved as there will be reduction of files and details that normally will take time to get due to larger volumes of data will be accessed with ease, these are some of the factors that are considered before an adoption process take place. The ability of an entity to reduce space, time and resources like the money spent or the cost of getting some work done goes a long way in influencing whether the owner/manager will adopt ICT. The efficiency of an SMEs is its ability to achieve result, the easy of satisfying a customer result in efficiency.

## **2.2 Information and communication technology (ICT)**

Igwe, *et al.*, (2020) defined ICT as a composition of people, skills, component, infrastructure, rules and procedures enables modern communication and computing. Shahadat *et al*, (2023) stated that ICT is the means of utilising information and communication tool or devices, such as-computer network, hardware and software. Chege, Wang and Suntu (2019) also added that ICT are the devices used to create, preserve, display, develop, package and transmit information through the use of radio, television,

computer, network, hardware, software, telephone and satellite system. Igwe, *et al* (2020) further added that those technologies are still relevant today and are still use along with emerging technologies robotics and artificial intelligence. These technologies have made it possible for entities to increase their marketing capabilities by reaching a larger targeted audience via the use of social media, mass SMS, online marketing and mobile marketing.

Khairuddin and Olowosuyi, (2020) noted that there are plethora definitions for what an SMEs is or its size, its definition changes due to a number of factors that influences it. Factors like- country, size, number of employers and developmental level. Small and Medium Enterprises are grouped accordingly by SMEDAN, 2021.

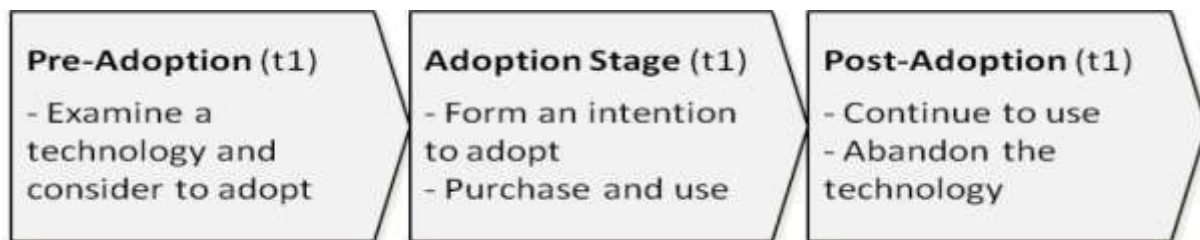
In Nigeria, SMEs are categorized based on their size and turnover. Nano/homestead enterprises are the smallest, with a maximum of two employees and a turnover of less than 3 million Naira. Micro enterprises employ between 3 and 9 people and have a turnover of 3 to 25 million Naira. Small enterprises employ 10 to 49 people and have a turnover of 25 to 100 million Naira. Finally, medium enterprises employ 50 to 199 people and have a turnover of 100 million Naira or more, but less than 1 billion Naira.

Igwe *et al*, (2020) also defines an SMEs as a small size business owned, managed and financed by a sole proprietor (one person) or partners whose business asset is less than five million not having more than 50 employees with a relatively small market share. A lot of scholars and researchers

have tried to determine the result of the acceptance of technology on the private enterprise and to adequately understand the essential factors that aids the growth of a business entity (Haug *et al.*, 2020; Mabula *et al.*, 2020). ICT, or Information and Communication Technology, is a crucial tool for SMEs in Nigeria. It encompasses a wide range of technologies, from computers and smartphones to software and internet connections. By leveraging ICT, SMEs can streamline operations, enhance communication, access information, and market their products and services more effectively. In the process of technology adoption, scholars have noted that at the individual stage the adoption process is divided into three stages

(Youngseek & Kevin 2011). The figure below shows the three stages of technology adoption, they are: pre-adoption stage, adoption stage and the post-adoption stage. In the pre-adoption stage, people may consider adopting a new technology, but no adoption has taken place at this stage, it is a consideration stage, a stage where people look out for the best technology to adopt. The adoption stage, at this stage an intention to adopt has been formed and the adoption has taken place, the act has led to the acquisition backed up by the ability to acquire (money). The post-adoption stage, is the stage when one can choice either to use the adopted technology or not, while leaving the technology for a new one, this is the last stage in this process (Pillay 2016).

**Figure 1: Stages of Adoption ICT**



**Source: Kim and Crowston, (2011)**

### 2.3 Perceived Ease of Use

Perceived ease of use" refers to how easy a user believes a technology is to use. In the context of SME ICT adoption, it's crucial because if SMEs find ICT tools to be user-friendly and efficient, they are more likely to adopt them and benefit from their advantages. Therefore, when evaluating the impact of ICT on SME growth, it's important to consider how easy it is for SMEs to

use these technologies. The accessibility of technology is another important aspect that influences its adoption. Venkatesh *et al.* (2022) established the concept of “perceived ease of use”, which reflects "the degree to which a person believes that using a particular system would be free of effort”. Tahar (2020) also added that user’s ability to easily access technology due to the facts that is common will influence their

willingness to adopt the technology. Furthermore, research has shown that a technology's easy accessibility to use notably impacts its adoption. In the context of mobile applications, studies have shown that subscribers are likely going to continue and encourage the use of an application that is known to be understandable and controllable (Hassanein and Head, 2007). Perceive goes hand in hand with growth, if SMEs believe ICT adoption will help to grow their enterprise, they will be more open ICT adoption.

Users willingness to adopt a new technology will be tested against the use of manual system (traditional marketing) to ascertain whether there is an ease of use in the technology adoption or not, the result will reflect whether or not I reflect on their growth, this will influence user's readiness to accept the technology. Also, the easy accessibility will reduce recognised risk associated with its acceptance (Tahar 2020). Furthermore, when SMEs recognises that the use of ICT it will save time and ensure efficiency in goods and service delivery and quality retention which has a positive effect on growth, also it adoption will enhance the development of SMEs at different levels of their business, be it to communicate (internally) or with external sources. SMEs are focused on profit-making, growth, expansion and efficiency, to achieve these things they most ensure customers retention and loyalty, ICT has enabled SMEs to be at the doors steps of their customer whether it is quality delivery of good and service or taking orders and

complains, ICT is at the forefront of this, for SMEs to deliver these services to people whatever, technology that is been used most be able to cater for a large number of people all at once in the most efficient way if it will positively influence growth.

## **2.4 Theoretical Review**

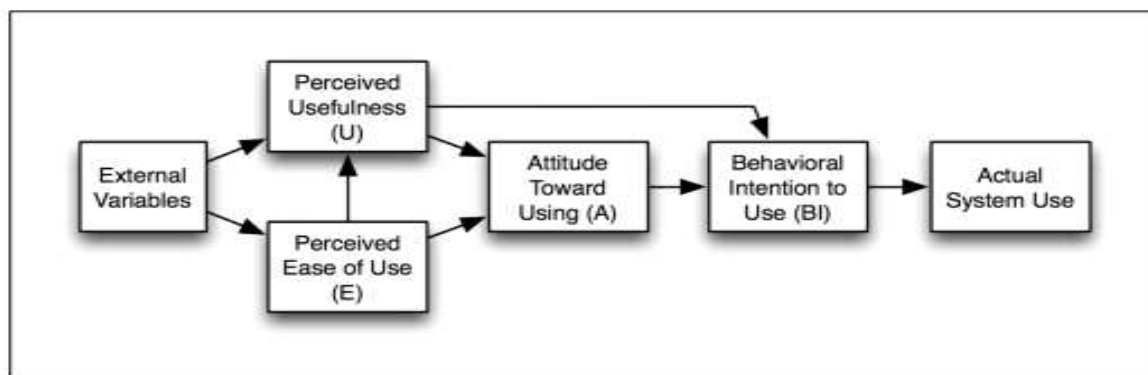
The study adopted Technology Acceptance Model (TAM) which was first introduced in 1986 by Davis, this theory is the leading theory in the study of ICT. This theory was presented by David as a way of understanding the determinant factors in the adoption of technology. This theory separates the factors responsible for introduction and prediction of the behaviour of likely subscribers of new technology (Olise *et al.*, 2014). Ayodeji and Victor, (2021) added that the theory was introduced in a bid to understand, explain acceptance and adoption of a specific technology. David proposes two constructs to the acceptance of ICT, they are: perceived ease of doing business and the perceived usefulness of technology (Priyal 2016). The technology acceptance model is seen by researchers as a system-based theory that is used to explain the concept of adoption and the utilisation of ICT (Hlaing, 2022). Also, Alfadda and Mahdi, (2021) added that the theory was put together to analysis the profitability of an individual or entity adopting ICT. This theory provides the blueprint that facilities the adoption and also the rejection of ICT by SMEs, this theory is the most accepted and also the most criticized technology adoption theory so far (Olise *et al.*, 2014).

The perceived ease of use is the point to when an individual believes the adoption of technology will relieve him of any difficulties and also make the work stress free, previous literature reviews showed that ease of use affects behaviour, goal, usefulness and its use (Chau, 1996). Davis *et al.* (1989) noted that the organisational ease of use is an important factor for people's reason of using technology, he also realised that the perceived ease of use also consciously and unconsciously influences the usage of technology through its effect on the perceived usefulness through the individual attitude towards using the e-mail communication, voice over IP system and social media usage among others.

The perceived usefulness of technology is belief that the use of ICT will help to enhance, growth and facilities one's job (Priyal, 2016). This affects the perceived usefulness, it is said that a person's attitude are indirectly affected by the external element (perceived ease of use and

through perceived usefulness) (Davis *et al.*, 1989; Hlaing, 2022). An identified (perceived) usefulness encourages the belief of a person puts in the decision process (Venkatesh and Davis, 2000). People access the foreseen outcome of the actions when dealing with perceived usefulness and makes selection based on the possible usefulness (Chau, 1996). Igbaria, *et al.*, (1997) opined that one of the characteristics of perceived usefulness is the impact on its utilisation, if SMEs leaders believe that the adoption of technologies will enhance their performance they should engage in the adoption of process.

Technology acceptance model is a paramount tool in the field of ICT acceptance. However, it has faced so many criticisms, some of which are; lack of proper accounting in non-organisational setting (Venkatesh and Davis, 2000), omission of minimal effects of technology acceptance in various degree (Sun and Zhang, 2006).



Source: Davis, 1989

**Figure 2 Technology Acceptance Model (TAM)**

The implementation of technology acceptance model in the course of this study are as follows, SMEs owners/managers will not adopt new

technology if they do not believe they will get reward/benefit (ease) from its adoption. The acceptance of new technology by any

organisation is based on the benefit they believe will flow in through its adoption, also the perceived ease of using a new concept also affect the reason for its adoption. There are different types of technology that are simple to understand and integrate than others, the ability of understanding a technology and integrating it into the operational system of SMEs has significant effect on its adoption. Technologies that are costly in terms of purchase and movement, requires additional manpower, special training this may lead to non-adoption by SMEs leaders/manager as they focused more on getting the best from its limited resources.

## **2.5 Empirical Review**

Colin, Galindo, and Hernández (2015) examined the relationship between ICT, strategies and efficiency of supply chain management among SMEs in Aguascalientes, Mexico. A survey was conducted among managers in 288 manufacturing SMEs in Aguascalientes. Data was analyzed using structural equation, EQ software support, as well as through linear regression models with SPSS software support. The importance of this work is that in the analyzed region (Aguascalientes) there have been few studies about the manufacturing industry, especially in aspects related to factors that influence productivity and hence competitiveness. The study of the SCM and the strategies followed by this industry explains the economic growth of the region in recent years, its improvement in infrastructure, and a substantial increase in jobs; and, above all, it accounts for

almost all exports. The results show that, indeed, the strategies and ICT have an impact on the performance of the SCM. The study demonstrated that ICT and SCM strategies significantly influence the performance of SCM in SMEs. This highlights the importance of these factors in enhancing the competitiveness and efficiency of manufacturing businesses.

Eze *et al.*, (2022) investigated the behavior pattern of SMEs on arising information communication technology acceptance. The goal of the study is to unify the research work done on information behavioural pattern, this research is a qualitative and an exploratory work, inductive approach was used while data were collected through interviews (unstructured and semi-structured) with 20 SMEs drawn from Luton directories. The first stage of the interview involved 4 participants and the second stages involved 16 participants. The result of the enquiry indicates that ICT acceptance is a function of information sources selection, the perceived information needs and the elements that determines information source selection using Technology, Organisation and Environment (TOE) at the framework for this study. Ezzaouia and Bulchand-Gidumal (2022) considered the effect of information technology acceptance on hotel performances, by examining the effect of ICT acceptance on hotel performance (HP) using a case study (a developing country). Quantitative approach and it is an exploratory research were used, 100 questionnaires were designed for general managers of exclusive hotels, the

supposition of the research were examined using partial least squares (PLS) method PLS-graph software version 3.2.8. The result of the study indicates that the significant effect of ICT acceptance on HP can be seen in the employee delivery capacity rather than placing emphasis on financial performance. The result goes hand in hand with the discovery Aboelmaged (2018), this suggested that use of IT in disseminating any type of information has a notable impact on the employee delivery capacity. The result is in consonance with the discovery of Shin *et al.* (2019) and Chevers (2015) this means that the adequate utilisation of the IT automatically leads to quality services rendered by the employees.

Onileowo and Fasiku, (2021) analysed the concept and the implementation of technology on SMEs performance in Nigeria, its limitation and challenges. The intention is to enhance the understanding of the effect of technology on SMEs' performance in Nigeria. This research work also studied the obstacles hindering the acceptance of ICT and discovered that most SMEs engages in local business practices considering its operation and marketing strategies. The study relied on secondary data gotten from Nigeria, by helping to identify the hidden causes, insufficient preparedness towards the acceptance of ICT, its operation, the need for ICT adoption, its application into business procedures, and the potential benefits for its adoption. The study concluded with the recommendation that more ICT training facilities should be created and that SMEs need to be more

opened to technology in terms of resources, internet connection and customer's ability.

### **3.1 Methodology**

This study employed a cross-sectional survey design, which allows for the collection of data at a single point in time to provide a snapshot of the current situation among SMEs in Kwara State. The choice of this design is appropriate for exploring the influence of digital skills and ICT adoption on the performance of SMEs, as it provides an efficient and cost-effective way to gather data from a large population.

The study population comprised 800 Small and Medium-sized Enterprises (SMEs) registered with the Kwara State Digital Skills Acquisition Centre in Ilorin, Kwara State. This population was deemed relevant, as these businesses have undergone some level of digital skills training, making them suitable for investigating the role of ICT in SME performance. Using an online sample size calculator (calculator.net), a sample size of 260 was determined. This calculation was based on a 95% confidence level and a 5% margin of error, ensuring that the sample size is statistically representative of the larger population. Simple random sampling was employed, a technique that ensures each SME in the population had an equal chance of being selected, minimizing bias and enhancing the generalizability of the findings.

The primary data source for this study was a structured research questionnaire. This questionnaire was designed to capture relevant variables, including SME performance, ICT

adoption, and other demographic information. A content validity test was carried out to ensure the questionnaire adequately captured all the necessary dimensions of the concepts being measured. Experts in the field of SME management and ICT were consulted to review the instrument, and necessary adjustments were made based on their feedback.

Data collected were analyzed using both descriptive and inferential statistics. Descriptive statistics, such as frequency distribution, percentages, and means, were presented in tabular form to summarize and describe the basic features of the data. This helped to provide a clear overview of the demographic characteristics of the SMEs and their responses regarding ICT adoption.

#### 4.1 Result and Discussion

##### Descriptive Statistics of Respondents

**Table 1: Information of Respondents and Business**

|                        |           |                |
|------------------------|-----------|----------------|
| Years of Experience    |           |                |
| 1-3 years              | 91        | 35             |
| 4-6 years              | 104       | 40             |
| 7-10 years             | 39        | 15             |
| More than 10 years     | 26        | 10             |
| Total                  | 260       | 100            |
| Business Type          | Frequency | Percentage (%) |
| Retail                 | 78        | 30             |
| Manufacturing          | 52        | 20             |
| Services               | 91        | 35             |
| Other                  | 39        | 15             |
| Total                  | 260       | 100            |
| Number of Employees    | Frequency | Percentage (%) |
| 1-5 employees          | 104       | 40             |
| 6-10 employees         | 91        | 35             |
| 11-20 employees        | 39        | 15             |
| More than 20 employees | 26        | 10             |
| Total                  | 260       | 100            |

##### Assumptions of Regression Analysis

For inferential analysis, multiple regression analysis was used to explore the relationships between the independent variables (such as ICT adoption) and the dependent variable (SME performance). Multiple regression was chosen as it allows the study to determine the extent to which ICT and other factors predict SME performance, while controlling for other variables. This approach helps to identify the significant predictors and provides insights into the strength and direction of the relationships. All respondents were assured of the confidentiality of their responses, and participation was voluntary. The study adhered to ethical standards of research by obtaining informed consent from the participants, ensuring no harm to respondents, and maintaining the privacy of their data.

In order to ensure the validity and reliability of the regression model, four key assumptions were

#### **Linearity**

The first assumption is that the relationship between the independent variable (use of technology) and the dependent variable (efficiency) is linear. This was checked by visually inspecting the scatter plot of residuals versus predicted values. The scatterplot revealed no obvious patterns or curves, confirming that the linearity assumption holds.

#### **Independence of Errors**

The Durbin-Watson test was conducted to assess whether the residuals (errors) are independent of each other. The Durbin-Watson statistic was [Insert Value], which falls within the acceptable range of 1.5 to 2.5, indicating that there is no significant autocorrelation among the residuals.

#### **Homoscedasticity (Constant Variance of Errors)**

Homoscedasticity assumes that the variance of errors is constant across all levels of the independent variable. A plot of standardized

met. These assumptions were evaluated and the results are summarized below

residuals against the predicted values was inspected. The absence of any funnel-like shape or patterns suggests that the residuals have constant variance, confirming that the homoscedasticity assumption is met.

#### **Normality of Residuals**

The normality of residuals was assessed using both a Q-Q plot and a histogram of the standardized residuals. The Q-Q plot showed that most residuals lie along the 45-degree line, and the histogram revealed a roughly bell-shaped distribution. Additionally, a Shapiro-Wilk test was performed, with a p-value greater than 0.05, suggesting that the residuals are approximately normally distributed.

#### **Test of Hypothesis**

**H0:** perceived ease of use of technology does not significantly affect the efficiency of small and medium enterprise in Kwara State

**Table 2: Model Summary**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
| 1     | .517 <sup>a</sup> | 0.6159   | 0.662             | 1.63511                    |

a. Predictors: (Constant), Efficiency

The model summary as indicated in table 1 above shows that R Square is 0.6159; this implies that 66% of variation in the dependent variable (efficiency) were explained by the independent variable (use of technology) while the remaining

34% is due to other variables that are not included in the model. This mean that the regression (model formulated) is useful for making predictions since the value of  $R^2$  is close to 1

**Table 3 ANOVA<sup>a</sup>**

| Model |            | Sum of Squares | Df | Mean Square | F      | Sig.              |
|-------|------------|----------------|----|-------------|--------|-------------------|
| 1     | Regression | 137.655        | 1  | 137.655     | 51.487 | .000 <sup>b</sup> |
|       | Residual   | 376.975        | 68 | 2.1594      |        |                   |
|       | Total      | 514.629        | 69 |             |        |                   |

a. Dependent Variable: Efficiency

b. Predictors: (Constant), use of technology

The table above summarized the results of an analysis of variation in the dependent variable with large value of regression sum of squares (137.655) in comparison to the residual sum of squares with value of 376.975 (this value indicated that the model does not fail to explain a lot of the variation in the dependent variables.

However, the estimated F-value (51.487) as given in the table above with significance value of 0.000, which is less than p-value of 0.05 ( $p < 0.05$ ) which means that the independent variable as a whole can jointly influence the increment in the dependent variable efficiency

**Table 4 Coefficients<sup>a</sup>**

| Model |                   | Unstandardized Coefficients |            | Standardized Coefficients | T      | Sig. |
|-------|-------------------|-----------------------------|------------|---------------------------|--------|------|
|       |                   | B                           | Std. Error | Beta                      |        |      |
| 1     | (Constant)        | 4.245                       | .420       |                           | 10.098 | .000 |
|       | Use of technology | .451                        | .063       | .517                      | 7.175  | .000 |

i. Dependent Variable: Efficiency

### Interpretation

The dependent variable efficiency of SMEs is used as a yardstick to examine the impact between the two variables (i.e., use of technology and Efficiency). The predictors is use of technology, as depicted in table 3 it is obvious that there is a direct relationship between use of **technology and efficiency**

**According** to the result in the table above use of technology t-test coefficient is 7.175 and the P-

### 4.2 Discussion of Findings

The findings of this study align with and extend the existing body of literature on the effect of technology acceptance on the performance and efficiency of small and medium enterprises (SMEs). Previous studies have explored similar

value is 0.000 which is less than 0.05 (i.e.  $P < 0.05$ ). This means that these variables are statistically significant at 5% significant level. Based on the analysis, the null hypothesis ( $H_0$ ) that perceived ease of use of technology does not significantly affect the efficiency of small and medium enterprises in Kwara State is rejected. The results demonstrate a significant positive impact of technology use on SME efficiency.

themes, and the results of those studies provide valuable context for interpreting the outcomes observed in this research. The findings of this study also substitute made by Aboelmaged (2018), Shin et al. (2019), and Chevers (2015),

who found that adequate utilization of IT leads to enhanced service quality and business performance. The results support the notion that technology, when effectively adopted, can drive substantial improvements in business processes,

### **5.1 Conclusion and Recommendations**

The findings from the analysis reveal that the perceived ease of use of technology significantly impacts the efficiency of small and medium enterprises (SMEs) in Kwara State. The model shows that 66% of the variation in SME efficiency is explained by the use of technology, indicating a strong relationship between these two variables. The high F-statistic and the significance value further support the conclusion that technology plays a crucial role in enhancing the operational efficiency of SMEs. Therefore, the null hypothesis ( $H_0$ ) is rejected, confirming that the use of technology positively and significantly affects SME efficiency in Kwara State. Based on the above the following recommendations were made;

SMEs in Kwara State should be encouraged to adopt and integrate modern technology into their

leading to higher efficiency and productivity. The consistent evidence across these studies reinforces the argument that technology adoption is a critical driver of SME efficiency.

operations. Government agencies, business associations, and financial institutions should collaborate to provide incentives, subsidies, and training programs that make technology adoption more accessible to small businesses.

It is crucial to provide continuous training and technical support to SMEs to help them fully leverage technology for improving efficiency. Workshops, seminars, and online courses focusing on digital tools and platforms can enhance the technological proficiency of SME operators.

The government should invest in improving the technological infrastructure within the state, including internet connectivity and access to digital tools, particularly in rural areas where SMEs might be lagging in technological adoption.

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