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Impact of Technological Innovation on Bank Service Delivery in Yobe State

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ABSTRACT

The study was carried out to investigate the impact of technological innovations on bank service delivery in Nigeria. The specific objectives were to determine the effect of automated teller machine, mobile banking and internet banking on bank service delivery in the Nigerian banking industry in Damaturu Metropolis. The study employed a survey research design. The population of the study consists of customers and employees of First Bank of Nigeria Plc, United Bank for Africa and Fidelity Bank Plc all in Damaturu Metropolis. The study made use of primary data sourced through questionnaire administration to 360 customers of these banks and 60 questionnaires administered to employees of these banks. All together 420 questionnaires were issued out while only 368 (315 customers and 53 employees) retrieved questionnaires were answered properly and valid for analytical purpose. Data collected were analyzed using regression analysis as a tool of analysis with the aid of Statistical Package for Social Sciences (SPSS). The result reveals that, there is a significant effect of automated teller machine, mobile banking and internet banking on bank service delivery in the Nigerian banking industry in Damaturu Metropolis. The study concludes that technological innovation has a significant effect on services delivered by banks in Nigeria. Recommendations were made to include, that the Nigerian bank management should improve on their collaboration with network providers to enhance the connectivity to avoid congestion on the ATM queues which save customers' time and improve customers' satisfaction; the study again recommends that all the banks operating in Damaturu Metropolis at large should develop mobile apps and persuade customers to have them in their mobile phones. Finally, the study recommends that customers of banks too should embrace the use of internet banking in order to receive better services in the comfort of their rooms and offices thereby decongesting the banking hall and reducing queues at ATMs.

KEYWORDS: Information Technology, employee performance, customer satisfaction, Deposit Money Banks and Technological Innovations.

ARTICLE DETAILS

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1.1 INTRODUCTION

Advancement in technology in the area of ICT is impacting significantly on businesses. Increasing customer service delivery, market share, becoming the high quality or low cost producer, developing new products and increasing workers' productivity depend more on the kind and quality of development of ICT are in organization. When banking activities and information technology are emerged, the concept of e-banking becomes popular. Technological innovation is the changes in technology that can significantly, improve its process and promote its service delivery system beyond its state of the art to produce quality goods and services (Taylor, 1958). The banks are enables to automate accounting process and back office function like maintenance of deposits, calculation of interest and maintenance of general ledgers. The automation of front office function improves customer service with reduction in processing time, hence improving the overall performance of Nigeria banks.

Every banking system must be ICT compliance in order to reach global market and survive in global competitive market environment. Ojokuku and Sajuyigbe (2012) argue that, the introduction of ICT has changed traditional and manual procedures of doing business. The use of technology based on automation and computers interconnection and other electronic devices in banking system are no longer exception but are becoming customs. Woherem and Adeogri, (2000) and Okonkwo, Obinozie and Echekoba (2015) observe that only banking systems that refurbish the whole of their payment and delivery systems and apply ICT to their operations are likely to survive and prosper in the 21st century. Therefore, banking system should re-examine their product

and service delivery system in order to properly position their businesses within the framework or ICT. Abubakar and Rasmaini (2012) argue that, the development in ICT has played an important role in improving service delivery standard in financial system like the banking sector. This has allowed for banking innovation and financial innovation.

Banking innovation is the unanticipated improvement in the array of banking products and instruments that are stimulated by unexpected change in customer needs and preferences, tax policy, technology and regulatory impulses (Bhattacharyya and Nanda, 2000; Okonkwo, *et al.* 2015). They further stress that, the development in the banking sector have not only led to the increase in number of banking institutions, but also the development in level of sophistication with new payment systems and asset alternatives to hold money. This is likely as a result of technological development and increase in competition as the number of institutions increase. Development in payment system have started to create close substitutes for hard currency, thus affecting a core part of banking.

Financial innovation in the banking industry has been spurred on by the forces described as new distribution channel systems, such as mobile and internet banking (Nover, 2007). As the industry has provide more ways for consumers to access their accounts, they have added significant costs to each institutions. Banks are therefore considering new ways to drive revenue through their distribution system among which is the drive to increase the customer satisfaction and retention.

Technological advancement has given rise to new innovations in the design of product and their delivery in the banking industry. Customer service and customer satisfaction are their prime work. Current banking sector has come up with a lot of initiatives that oriented to providing a better customer services facilitated by new technologies. Banking through internet has emerged as a strategic resource for achieving higher efficiency, control of operations and reduction of cost by replacing paper based and labor intensive methods with automated procedures thus leading to higher productivity and profitability.

The return on technology is not just a function of the investment but of the impact of the change that investment creates. This suggests therefore that it is essential for technological innovations to change the service offerings of organizations and gradually, the ability to innovate has thus become accepted as a crucial prerequisite of enterprise development and entrepreneurship (Bahiti &Shahini, 2010). However technological innovations in the banking industries are characterized by factors such as huge investment and the high transaction cost incurred by the customers. Therefore it is essential for banks to effectively and efficiently manage these factors in order to delight, attract and retain customers, thereby minimizing the rate of customer attrition.

In order to tap the potentials of banking innovation, banks deploy ICT based banking products and services, among others include, internet banking, mobile banking solutions, automated teller machine (ATM), point of sale (POS) terminals, human resources solution and computerized banking accounting. Deposit money banks have over the years streamlined their organization, tailored their products and services delivery and automated their operation probably to enhance their performance and capture the market. As the struggle to enhance performance by the banks, the focus is moving to the complete automation of all their operation and services. Abdullahi (2012) rightly observes that, the system is highly competitive and competition is expected to motivate new players of local and global scope enters the market. He posits that as the competitive terrain becomes more challenging, banks need to maintain their competitive edge, and to do this, they have to adopt new technology.

Manager in organizations should manage the people and their employees not only to make them comply with their directives and company policies and national law, but also to learn, accommodate and benefit from them. They have to study their personality, motivate and provide conducive environment for them to perform effectively. Commensurate reward should be given to employees for the performance of their roles and other extra rewards for their individual and team creativity and innovation. Group norms that promote individual interaction and improved performance should be encouraged (Dauda, 2010).

Customer on the other hand, prefer to deposit money into a system in which they can obtain a good timely information and payment services (Kemppainen, 2008). Customer dissatisfaction with branch banking because of long queuing, and poor service is an important reason for the rapid movement to electronic delivery (Karjaluoto, Mattila & Pento, 2002). Deposit money banks in Nigeria have invested heavily in financial innovation due to their cost advantage on a per-transaction basis. Can this movement of safe and efficient retail payment systems by the banks therefore, enhance effectiveness of the system, boost consumer confidence and enhance consumer satisfaction, improve employee productivity and facilitate the functioning of commerce in Nigeria?

In spite of the increase electronic banking products and service, customers especially those in Nigeria still patronize the traditional bricks and mortar banking halls for basic banking services. For example, while it is generally expected that the proliferation of ATMs and point of sale (POS) terminals reduce cash withdrawals from the banking halls, customers still patronize the banking halls for cash withdrawal transactions over the counter.

The general objective of the study is to investigate Impact of Technological Innovation on Bank Service Delivery in Yobe State but the specific objectives are thus:

- To investigate effect of Network Failure on bank service delivery of banks in the in Damaturu Metropolis, Yobe State
- To examine if Cash Jam does bank service delivery of banks in Damaturu Metropolis, Yobe State;
- To find out if Internet Fraud has no significant effect on bank service delivery banks in Damaturu Metropolis, Yobe State.

It is in this background that, this study aims to determine the effect of technological innovation on banks service delivery of selected deposit money banks in Nigeria. Hypotheses formulated include:

H01: Network Failure has no significant effect on bank service delivery of banks in the in Damaturu Metropolis, Yobe State
H02: Cash Jam does not affect bank service delivery of banks in Damaturu Metropolis, Yobe State;
H03: Internet Fraud has no significant effect on bank service delivery banks in Damaturu Metropolis, Yobe State.

2.0 REVIEW OF RELATED LITERATURE

2.1 Concept of Innovation

Innovation is a complex process related to changes in production functions and processes whereby firms seek to acquire and build upon their distinctive technological competence understood as the set of resources a firm possesses and the way in which these are transformed by innovative capabilities (Therrien, Doloreux & Chamberlin, 2011). Innovation at firm level refers to the firm receptivity and propensity to adopt new ideas that led to development and launch of new products (Rubera & Kirca, 2012). According to Oslo Manual, innovation is defined as the implementation of a new or significantly improved product or service, process, a new organizational method in business practices or a new marketing technique, workplace organizational or external relations (OECD, 2005). The recent definition of innovation adopted by UK policymakers and applied by scholars (Stoneman, 2010) in the literature is, a successful exploitation of new ideas. Looking at this definition new ideas involve, new product and process or service; exploitation refers to applicability of the ideas; and successful implies innovation is adapted by the market from firm level viewpoint and the target is increased profitability.

Innovation can classified into four as given by the Oslo Manual (OECD, 2005), these include product innovation, process innovation, organization innovation and marketing innovation. Product innovation is regarded as introduction of new products or services, or bringing significant improvement in the existing products or services (Polder, Leeuwen, Mohnen & Raymond, 2010). Process innovation is the implementation of new or significantly improved production or delivery method. This includes significant change in techniques, equipment and/or software, for instance installation of new improved manufacturing technology, such as automation equipment or real-time sensors that can adjust processes, computer-aided product development (OECD, 2005). Marketing innovation is the implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or product pricing. While organizational innovation is the implementation of a new organizational business practices, external relations and work place OECD (2005). Organizational innovation can increase efficiency and the performance of the organization by decreasing the cost and administrative cost. Organizational innovations also aimed at improving workplace satisfaction and labor productivity, gaining access to non-tradable assets such as non-codified external knowledge, or reducing costs of supplies for instance, first-time introduction of management system for general production or supply reengineering, lean production quality management system.

Financial innovations in deposit money banks in Nigeria are non-paper computer-based technology payment instruments (Idowu, Ngumi & Muturi, 2016). They further stress that, this electronic payment system is agreeable to electronic platform such as automated teller machines (ATMs), point of sale (POS) terminals, internet payment, electronic fund transfer, debit and credit cards, telephone banking, personal computer banking and wire transfers among other. They add that, to become relevant in global financial issues, banks have realized that, they embrace technology, repackage product in manners acceptable to customers and use it as competitive strategy for their core competence.

2.2 Innovations in the Banking Sector

According to Mutuku and Nyaribo (2015) technological changes like the use of among other innovations, Internet-Banking, Automated Teller Machines, Electronic Funds Transfer and mobile banking are fast establishing considerable changes in the banking sector replacing traditional methods.

i. Automated Teller Machine

Automatic Teller Machine (ATM) is a device which comprises of an input device into which items can be deposited. It also has an imaging and sorting device which sorts deposited items to determine whether the deposited items are banknotes or cheque (Davis 2003). ATMs enjoy wide acceptance by customers of banks since they can offer the same services as the bank tellers thus reducing the time taken in the banking halls. Tufano, (1989) carried out a research on financial innovation and first mover advantages with the objective of the study being to determine whether financial products innovators enjoy first mover advantages.

The researcher concluded that the innovators that created new financial products, in the initial stage did not charge higher prices until imitative products appeared and in the long run charged lower than rivals hence leading to losses. Agboola (2001) carried out a study that showed that there were positive impacts of ATM on the banking performance. In this study employees' productivity, customer satisfaction, service delivery and operational efficiency were used as a measure of the performance and the outcome was that the banks with high performance were using ICT through the use of ATMS.

ii. Mobile Banking

The speed at which technology is developing has created a major occasions for providers of fiscal services to provide services through several electronic channels with mobile phone being among the most preferred platforms for using monetary services by bank consumers (Karjaluoto & Pento 2007). Customers are able to access their account balances, make bill payments, airtime top up, account links, deposits money to their accounts and other customers' accounts at the comfort of their offices without having to

visit the banking halls. This has improved employees' productivity since they can concentrate on innovating better products for their customers due to the fact that no long queues are in the banking halls. Mobile banking has helped in enhancing ubiquity, reachability, personalization and convenience to the customers.

iii. Internet Banking

In an effort to serve their customers better, banks have adopted internet banking which is a self-service technology which has been availed to enable access banking services conveniently. Internet banking help in accessibility, confidentiality, convenient services and is a less complex procedure which enables consumers to transact at the comfort of their offices as stated by Egwali (2008). Internet banking flexibility will enable the customers to access their accounts at their convenience and thus giving the banks additional revenue, improving on customer satisfaction and reduce customer queues at the Banking halls. Freedman (2000) observes that banking through the internet is composed of three key appliances, network money, value cards and access to new devices and therefore banking by internet is just the adoption of new tools and is hence not taken much consideration as much. Santomero and Seater (2007), Prinz (2009) and Tarkka (2005) demonstrates models which show that an internet substitute for currency is likely to crop up and grow but this will depend on the characteristics of different technology and the users of the technology.

2.3 Service Delivery in the Banking Industry

According to Parasuraman et al. (1985), the study of customer service delivery has gained interest just after the concern on improving the quality of products appeared, and services are increasingly important in the global. Service delivery constitutes a considerable element of any business venture and the application of improved ICT in delivering services to customers can enhance both internal and external business operations. The utilization of ICT solutions by business organizations can transform significantly the service delivery to its customers. A great understanding of the role of ICT in business value and service delivery can provide investors more confidence and direction in their ICT utilization in order to improve customers' satisfaction (Johnson, 2005). The adoption of ICT in the banking sector has therefore greatly improved banking services and brought about accuracy in the banking record within the sector. Adoption of ICT in the banking sector enable speed of service delivery and bank transactions, time saving, error rate reduction, management decisions, enquiries on accounts and number of queues in the banking hall.

Today, information and communication technology has changed the Banking industry in such a way that it becomes characterized as based on services (Fitzsimmons, 2000). Fierce competition has obliged Banks to look for an effective way to differentiate in the market and augment the likelihood of customer service delivery. However, even though customer service delivery in banks was not always targeted when looking for mediating factors towards financial performance (Mukherjee et al., 2003); additionally, banks struggle to find or develop instruments to measure the quality of their customer service delivery (Bahia & Nantel, 2000; Bhat, 2005). Delivering customer service is indeed an important marketing strategy (Berry & Parasuraman, 1995), but the difficulty in defining customer service delivery and customer satisfaction, as well as problems in deploying to specific contextual instruments for measuring such constructs, represent important constraints for the Banks to approach their markets.

However, contemporary factors like more demanding and informed customers, the emergence of new technologies, and the competition increase (Cooke, (1997) modified the relationship between banks and customers, and strategies for survival and business expansion started to approach this seriously (Global Finance, 2000) and target customer service delivery (Frei et al., 1997). Hence, customers who are satisfied with service delivery are less likely to shift to other banks, therefore increasing such things as loyalty and retention (Al-Hawari et al., 2005; Angelis et al., 2005).

Interestingly, computers and information technology (IT) in particular play an important role

(Shoebridge, 2005), and this is one reason why the banking industry is among the most intense in deploying information systems (Drucker, 1999). With the increase of Electronic Banking services the most recurring problems have been mitigated (and, in some cases, solved); as an effect, the volume of services increased, service fulfillment became easier, and the customer experience turned out to be more comfortable. It is noticeable that the new technologies, particularly in Electronic Banking, enabled banks to service customers not only in branches and other dedicated servicing sites, but also in domiciles, work places and stop-and-shop stores, as well as in a myriad of other channels (Lovelock, 1996; Al-Hawari et al., 2005).

2.4 Theoretical Framework

This research tried to investigate the effect of technological innovation on bank service delivery is anchored on Task technology Fit Theory.

Task Technology Fit Theory

Task technology fit theory was developed by Dishaw and Strong (1999). The theory asserts that it is more likely to have a positive impact on individual performance and be used if the capabilities if information and communication technology matches the tasks that the user must perform. According to Goodhue and Thompson (1995), the factors that measure task-technology fit include quality, ease of use or training, authorisation, compatibility, timeliness, systems reliability and relationship with users. The theory is important in the analysis of various context of a diverse range of information systems including electronic commence systems and combined with or used as an extension of other models related to information system outcomes. The theory maintains that a

match between business tasks and information technology is important to explain and predict the success of information systems, whereby success has been related to individual performance and group performance (Goodhue & Thompson, 1995; Zigurs & Buckland, 1998). Zigurs, Buckland, Connolly and Wilson (1999) later tested this theory for group support system to establish the requirement of group support system to fit group tasks. For mobile information system, task-technology fit has been shown general relevant, but the theory has been criticized about specific questions regarding the applicability of task technology fit to mobile information system remain unanswered.

This model is in consistence with one proposed by Delone and Mclenan (1992) such that both utilization and users attitude about technology leads to individual impact. The difference is task technology fit goes beyond Delone and Mclenan model in two ways: first, it highlight the significance of task technology fit in explaining how technology leads to performance impact; second, it is more explicit concerning the link between the construct providing stronger theoretical basis for thinking about a number of issues relating to the impact of information technology and performance.

Task technology fit opines that, a match between business tasks and information technology is significant to explain and predict the success of financial innovation. The theory is relevant to the work in the sense that as a result of the observable changes in banking tasks and related technology requirement, it becomes necessary to assess the applicability of the theory of task technology fit to mobile technologies and mobile use contexts, and to carefully determine the needs of theory adjustment and extensions. It will enable the study analyze how innovativeness in banks contribute to competitive advantage and improved performance in Nigeria

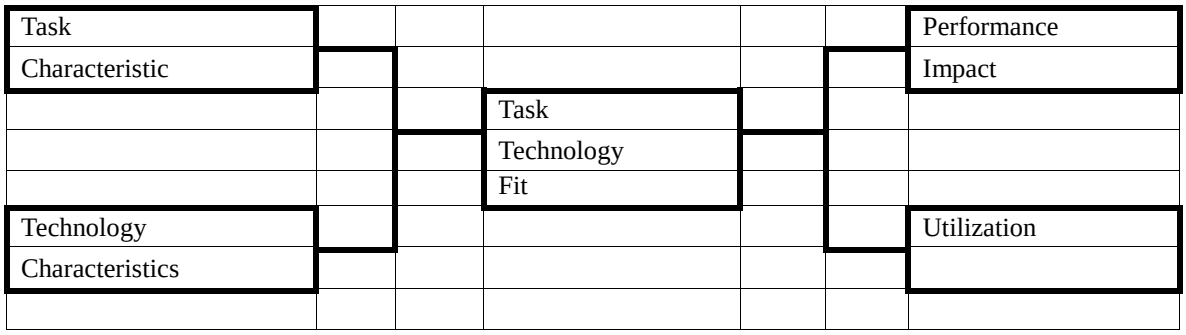

Figure 2: Task Technology Fit Theory
Source: Goodhue and Thompson, 1995

2.5 Empirical Review

Ovia (2001) in a study on internet banking practices and potentials in Nigeria opined that the revolution in ICT has made the banking sector changed from the traditional mode of operations to presumably better ways with technological innovation that improves efficiency. Eight banks were purposively sampled in Ibadan in a survey study. The results from SPSS led to the conclusion that banking in Nigeria has increasingly depended on Technological innovations and that the IT budget for banking is by far larger than that of any other industry in Nigeria.

Dauda and Akingbade (2011) researched on the technology innovation and Nigerian banks performance to assess the employee's performance and customer's responses. The study adopted a survey research design. Primary data were sourced through administration of questionnaires following random sampling procedure. Pearson Correlation were adopted as a statistical tool using SPSS, to ensure the validity of the instrument, heuristic evaluation method was adopted. The study concluded that, the introduction of ICT has influenced customer satisfaction, employee's performance, increased banks return on equity and profitability.

Abou-Moghli, Al Abdallah and Al Muala (2012) investigated the impact of innovation on realizing the competitive advantage in the banking sector in Jordan. The main objective of this study is to examine the impact of innovation on realizing competitive advantage using the four dimensions of competitive advantage which include cost quality, time and flexibility. The study employed descriptive research design. Primary data was obtained through questionnaire administration with Lickert five-point scale. Cronbach's alpha was computed to assess the reliability of the instruments. Multiple regression was used as a tool of analysis. The research concluded that, innovation has a positive and significant impact on competitive advantage as for the four dimensions combined together shows better result under the impact of innovation. This indicated that, the use of innovation in all competitive advantage dimension will creates eventually much better performance for banks.

Another research was carried out to investigate the effect of innovation on financial performance of commercial banks in Kenya (Ngumi, 2013). The study employed descriptive research design. Purposive sampling procedure to identify the sample units was used. The sample units were 20 commercial banks of which ten 10 are listed commercial banks. Both primary and secondary data were used. Secondary data was collected from the Central Bank of Kenya and annual reports of the banks while primary data was sourced through questionnaire administration to senior staff management of the banks under study. Cronbach's alpha was used to

test for reliability of the questionnaire with the aid of SPSS version 20, while regression analysis was used as a statistical tool. The study revealed that, bank innovations have a positive influence on the income of commercial banks in Kenya. The study concluded that, bank innovations influence financial performance of commercial banks in Kenya positively. The adoption of innovations by commercial banks has a high potential of improving financial performance and hence better returns to the shareholders.

3.1 METHODOLOGY

This research used a cross-sectional research design and aimed at investigating the effect of technological innovations on bank service delivery customer satisfaction within the Nigerian banking industry as it focuses on a specific phenomenon at a specific point in time. Structured questionnaires were used as a data collection instrument. Quantitative research methods was employed in addressing the research objectives. Primary data was collected through administration of questionnaires to bank customers and employees in First Bank of Nigeria Plc, United Bank for Africa and Fidelity Bank Plc all in Damaturu Metropolis, Yobe State of Nigeria. The closed-ended questions were made up of four-point Likert scale questions. The study population comprises all bank customers and employees of the selected banks in Nigeria and sample unit of analysis drawn from these three banks. Three hundred and sixty (360) electronic banking customers and sixty (60) employees were selected for the study from the selected banks in Damaturu Metropolis. In sum, the study sampled four hundred and twenty (420 respondents. One hundred and twenty (120) customer were chosen from each bank as respondent 'A' subscribing to electronic banking products and services while twenty (20) employees each from the selected banks as respondents 'B'.

The study used purposive sampling technique to identify the sample units of the customers. All the customers used as respondents are those that banked with the selected bank for not less than five years. This a judgmental non-probability sample. The main objective of using purposive sampling technique is to produce a sample that can be logically assumed to be representative of the population (Lavrakaz, 2008). Simply random sampling to select and employees of the selected banks. The research made use of statistical package for social sciences (SPSS) to quantitatively analyse and summarize the data collected. The research employed regression analysis to determine the effect of technological innovation on bank service delivery.

4.0 DATA PRESENTATION AND ANALYSIS

Respondents for this research came from different sections and department of the selected banks that adopted and utilized ICT.

Table 1: Questionnaires Distributed and Returned

Category of Respondents	Questionnaires Distributed	Questionnaires Returned	Percentage (%) Returned
Bank customers	360	315	87.50
Bank Employees	60	53	88.33

Source: Field Survey, 2024

Table one above indicates that 360 questionnaires were distributed to the customers of the selected banks in Damaturu Metropolis, out of which 315 were returned given us a response rate of 87.50%. These were used to analysed and test the first hypothesis. On the other hand, 60 questionnaires were distributed to employees of the selected banks in Damaturu Metropolis, out of which 53 were fully completed and returned, given us a response rate of 88.33% and these was equally used for analysis and test of the second hypothesis.

4.1 Regression Analysis Result

The result of the regression analysis carried out was presented in the model summary, ANOVA and coefficient Tables respectively.

- **Model Summary**

The result in Table 2 showed that the regression coefficient, R = .686 indicates a positive relationship between the independent variables and dependent variable. The coefficient of determination (R^2) was .470. The coefficient of determination showed that 47.0 % of the variation in bank service delivery is explained by ATM, mobile banking and internet banking.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Sig. F Change
1	.686[a]	.470	.444	.973	.000

- Predictors: (Constant), internet banking, mobile banking, ATM
- Dependent Variable: Bank Service Delivery

Source: Field Survey, 2024.

- **Analysis of Variance (ANOVA)**

The result of the analysis of variance as presented in Table 3 showed that the value of F (18.028) is significant and the significance level (.000) is less than 0.05 (P-value = 0.000 < 0.05). This implies that over all regression model is statistically significant, valid and fit. The valid regression model implies that all independent variables (ATM, mobile banking and internet banking) are capable of explaining the effect of technological innovations on banks service delivery.

Table 8: Analysis of Variance (ANOVA)

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	8.719	3	2.906	18.028	.000[b]
Residual	9.834	363	.161		
Total	18.554	367			

- Dependent Variable: Bank Service Delivery
- Predictors: (Constant), Internet Banking, mobile banking, ATM

Source: Field Survey, 2024.

- **Regression Coefficient**

The regression coefficient in Table 3 indicates that there is .97.3 % variation in bank service delivery explained by ATM, mobile banking and internet banking, a unit increase in Automated Teller Machine (ATM) would increase bank performance by 31.5 % and a unit increase in mobile banking would affect bank performance by 21.7 %. The result of the study further revealed that a unit change in internet banking would significantly affect bank performance by 21.7 %. Based on this result, Automated Teller Machine (ATM) has more significant effect on bank service delivery on the selected Banks in Damaturu Metropolis, Yobe State.

Table 3: Regression Coefficient

	Variable	B	t-value	p-value	Decision
(Constant)		.973	2.883	.005	
	ATM	.315	3.366	.001**	Rejected
	Mobile banking	.217	2.027	.027**	Rejected
	Internet Banking	.278	2.497	.008**	Rejected

a. Dependent Variable: Bank Service Delivery

Source: Field Survey, 2024.

4.2 Test of Hypotheses

The three hypotheses formulated in this study were tested as follows:

- **Test of hypothesis one**

H01: Network Failure has no significant effect on bank service delivery of banks in the in Damaturu Metropolis, Yobe State

To test this hypothesis, the strength of the relationship between Network Failure and bank service delivery was measured by the calculated p-value = 0.001 at a significance level (α) of 0.05. Since the computed p-value is less than the significance level (α) of 0.05 (*p-value* 0.001< α 0.05), the null hypothesis was rejected. Therefore, we conclude that there is significant effect of Network Failure on bank service delivery in Damaturu Metropolis, Yobe State.

- **Test of hypothesis two**

H02: Cash Jam does not affect bank service delivery of banks in Damaturu Metropolis, Yobe State;

To test this hypothesis, the strength of the relationship between Cash Jam and bank service delivery was measured by the calculated p-value = 0.027 at a significance level (α) of 0.05. Since the computed p-value is less than the significance level (α) of 0.05 (*p-value* 0.027 < α 0.05), the null hypothesis was rejected and alternate accepted. Therefore, it was concluded that there is significant effect of Cash Jam on bank service delivery in Damaturu Metropolis, Yobe State.

iii. Test of hypothesis three

H03: Internet Fraud has no significant effect on bank service delivery banks in Damaturu Metropolis, Yobe State.

To test this hypothesis, the strength of the relationship between Internet Fraud and bank service delivery was measured by the calculated p-value = 0.008 at a significance level (α) of 0.05. Since the computed p-value is less than the significance level (α) of 0.05 (*p-value* 0.008 < α 0.05), the null hypothesis was rejected. Therefore, we conclude that there is significant effect of Internet Fraud on bank service delivery in Damaturu Metropolis, Yobe State.

4.3 Discussion of Findings

The discussion of findings was based on the objectives of the study as follows:

The result collected from the respondents on objective one showed that Network Failure has significant effect on service delivery of banks in Damaturu Metropolis, Yobe State. Regression was used to test the hypothesis at 5 % level of significance and the p-value (0.001) was lower than the significance level. This can be statistically given as P-value 0.001< α = 0.05. The result of this study is in line with previous studies by Dada, Adelowo and Siyanbola (2012) who asserted that there is improvement in banks' performance if Commercial Banks improve their network service routers.

From objective two, based on data collected from the respondents, findings of the study indicated a positive significant effect of Cash Jam ATMs on bank service delivery in Damaturu Metropolis, Yobe State. Regression was used to test the hypothesis at 5 % level of significance and the p-value (0.027) was lower than the significance level. This can be statistically given as P-value 0.027< α = 0.05. This was in line with Ovia (2011) and Dauda and Akingbade (2011) who found a positive relationship between jam of cash on the ATM and performance of the Nigerian banking industry.

From o objective three, the result from the analysis indicated that there is a significant effect of internet fraud and bank service delivery in Damaturu Metropolis, Yobe State. Regression was used to test the hypothesis at 5 % level of significance and the p-value (0.008) was lower than the significance level. This can be statistically given as P-value 0.008< α = 0.05. The finding is supported by Ovia (2001) whose study found a positive significant relationship between internet fraud and bank performance. It is from the above findings, the following recommendations are made:

i. Knowing that effective network enhances operational efficiency of service delivery of banks in Damaturu, bank management should also improve their networks, as this will encourage customers to patronize the new innovations incorporated into banks in Damaturu.

ii. The study again recommends that banks in Damaturu Metropolis and Yobe State, should consistently chech cash jam on ATMs, as this will encourage cutomers to patronize the ATMs instaed of frequent use of the banking halls.

iii. Finally, the study recommends that banks should should put I place moderlities that will check internet fraud, as this will encourage customers to patronize banks mobile platforms.

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