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Information Systems and Service Delivery of Commercial Banks in Yenagoa Bayelsa State

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Abstract
This study investigates the relationship between information systems, specifically Transaction Processing Systems (TPS) and Decision Support Systems (DSS), and service delivery in commercial banks in Yenagoa, Bayelsa State. A cross-survey research design was adopted, enabling the collection of primary data from 78 staff members and customers of selected commercial banks using a structured questionnaire. The data collection was facilitated through a five-point Likert scale to measure perceptions regarding TPS, DSS, and service delivery. The study's results reveal a significant positive correlation between both TPS and DSS with service delivery, with TPS showing a stronger correlation. Pearson's Moment Correlation Coefficient was used to test these relationships, confirming the role of efficient information systems in improving banking service delivery. The findings highlight the importance of enhancing TPS and DSS to improve operational efficiency and customer satisfaction in commercial banking. The study recommends continuous system upgrades, staff training, and robust monitoring systems to ensure improved service delivery in the banking sector.

Keywords: Information Systems, Transaction Processing Systems, Decision Support Systems, Service Delivery, Commercial Banks, Pearson Correlation

Introduction
In the contemporary global economy, information systems have become indispensable to the operations and performance of financial institutions, particularly commercial banks. Information systems refer to a coordinated set of components designed to collect, process, store, and disseminate information to support decision-making and control in organizations. In the banking context, these include hardware, software, networks, procedures, and personnel involved in processing and transmitting information used in banking operations and service delivery. Information systems are pivotal for enhancing service delivery, competitiveness, and efficiency in the banking sector (Ezema et al., 2018; Popoola & Haliso, 2022).

Commercial banks play a critical role in financial intermediation by mobilizing savings, extending credit, and facilitating payment systems across economies. In Nigeria, the banking sector has experienced remarkable transformation over the years through deregulation, consolidation, and the adoption of modern information and communication technologies. One of the most prominent developments in the Nigerian banking industry is the integration of information systems to automate banking processes and improve service delivery. These systems include electronic banking platforms such as automated teller machines (ATMs), internet banking, mobile banking,

point-of-sale (POS) terminals, and electronic funds transfer systems. Collectively, these information systems have redefined how banks interact with customers and deliver services (Nwanne et al., 2022).

The rapid advancement of information technology has altered customer expectations, compelling banks to provide faster, more reliable, and more convenient services. Customers now demand real-time access to banking services with minimal physical interaction. In response, commercial banks have increasingly deployed information systems to enhance operational efficiency, reduce transaction time, and improve service quality. Studies have shown that effective deployment of information systems improves customer satisfaction and enhances service delivery in the banking sector (Kolawole et al., 2025).

Empirical studies conducted within Yenagoa and similar environments indicate that electronic service delivery significantly influences customer attitudes toward banking services. For instance, research has demonstrated that customers' perceptions of banking services improve when electronic banking systems are efficient, reliable, and user-friendly (Ademe-Godwin, 2023). This suggests that information systems play a crucial role in shaping customer experience and satisfaction in commercial banks.

Despite these advancements, the effective utilization of information systems for service delivery in Nigerian banks remains a challenge. Issues such as network failures, system downtimes, inadequate ICT infrastructure, and limited technical skills among bank staff have continued to affect service delivery. Customers frequently experience delays, failed transactions, and service interruptions, which undermine confidence in electronic banking systems (Ololade & Ogbeide, 2017). These challenges are often more pronounced in regional capitals such as Yenagoa, where infrastructural and environmental constraints may affect the smooth operation of information systems.

Furthermore, research has shown that while investment in information systems enhances bank performance, successful outcomes depend on proper management, continuous system upgrades, and staff training. Ezema et al. (2018) observed that banks that strategically align information systems with organizational goals tend to achieve higher levels of efficiency and service quality. Conversely, poor system integration and inadequate maintenance reduce the effectiveness of information systems in service delivery.

One major problem is that the availability of information systems does not always guarantee effective service delivery. Commercial banks in Yenagoa have introduced electronic banking platforms such as mobile banking, internet banking, and automated teller machines, yet customers frequently encounter network disruptions and system downtimes that hinder smooth transactions. These challenges raise concerns about the reliability and efficiency of information systems used in service delivery (Ololade & Ogbeide, 2017).

Another issue relates to customer satisfaction and perception of service quality. Studies have shown that customers' attitudes toward banks are influenced by the effectiveness of electronic service delivery (Ademe-Godwin, 2023). However, inconsistencies in the performance of information systems across banks in Yenagoa have resulted in uneven service quality, leading to customer dissatisfaction and loss of confidence in digital banking platforms.

In addition, the complexity of modern banking information systems requires skilled personnel and continuous training. Many commercial banks face challenges related to inadequate technical expertise and insufficient staff training, which limits the effective utilization of information

systems. Poor system handling and limited customer support further exacerbate service delivery problems (Popoola & Haliso, 2022).

There is also a noticeable gap in empirical studies focusing specifically on the relationship between information systems and service delivery in commercial banks operating in Yenagoa, Bayelsa State. Most existing studies focus on national or metropolitan contexts, leaving limited evidence on how local environmental and infrastructural factors affect the effectiveness of information systems in smaller urban centers. Therefore, the problem confronting this study is the persistent inefficiency in service delivery by commercial banks in Yenagoa despite the adoption of information systems. This study seeks to examine how information systems influence service delivery in commercial banks in Yenagoa, Bayelsa State, and to identify the challenges hindering their optimal use.

Objectives of the Study

The aim of this study is to examine the relationship between information systems and service delivery in commercial banks in Yenagoa, Bayelsa State. The specific objectives were to:

1. To examine the relationship between transaction processing systems and service delivery in commercial banks in Yenagoa, Bayelsa State.
2. To assess the relationship between decision support systems and service delivery in commercial banks in Yenagoa, Bayelsa State.

Research Questions

1. What is the significant relationship between transaction processing systems and service delivery in commercial banks in Yenagoa.
2. To what extent decision support systems is significantly related to service delivery in commercial banks in Yenagoa, Bayelsa State

Hypotheses

The subsequent null hypotheses were established to direct the study.

H_{01}: There is no relationship between Transaction Processing Systems and service delivery in commercial banks in Yenagoa, Bayelsa State.

H_{02}: There is no relationship between Decision Support Systems and service delivery in commercial banks in Yenagoa, Bayelsa State.

Information Systems (IS)

An Information System is a coordinated set of components and resources designed to collect, process, store, and disseminate information to support decision-making, coordination, control, analysis, and visualization in an organization (Laudon & Laudon, 2017). Information Systems are essential in facilitating business processes, supporting management decision-making, and ensuring that businesses remain competitive in the digital landscape.

IS can be categorized into several types, including transaction processing systems (TPS), management information systems (MIS), decision support systems (DSS), and enterprise resource planning (ERP) systems. These systems serve different organizational needs, from streamlining routine processes to supporting high-level decision-making.

The role of IS in organizations extends beyond just information processing. Modern IS also enable real-time collaboration, global communication, and analytics-driven insights, which are essential in today's rapidly evolving business environment (Porter & Heppelmann, 2014). Digital transformation initiatives, such as the move to cloud computing and the adoption of Big Data analytics, have further enhanced the role of IS in driving innovation and efficiency.

Transaction Processing Systems (TPS)

Transaction Processing Systems (TPS) are fundamental information systems designed to record, process, and manage routine day-to-day business transactions of an organization. In commercial banks, TPS form the operational backbone that supports core banking activities such as deposits, withdrawals, fund transfers, loan repayments, account updates, and payment processing. These systems ensure that high volumes of transactions are processed accurately, efficiently, and in real time, thereby supporting effective service delivery (Laudon & Laudon, 2020).

In the banking sector, TPS are critical because of the volume and frequency of customer transactions handled daily. Commercial banks in Nigeria, including those operating in Yenagoa, Bayelsa State, rely heavily on TPS to deliver timely and reliable services through platforms such as automated teller machines (ATMs), point-of-sale (POS) terminals, mobile banking, and internet banking applications. TPS enable banks to process customer requests quickly while maintaining Transaction Processing Systems and security, which are essential for customer confidence and satisfaction (O'Brien & Marakas, 2019).

A key feature of transaction processing systems is their ability to handle large volumes of structured data with speed and accuracy. TPS operate using predefined rules and procedures, ensuring that transactions are validated, recorded, and updated consistently across banking databases. This minimizes errors and reduces the need for manual intervention, thereby improving operational efficiency and reducing service delays. According to Stair and Reynolds (2021), organizations that deploy efficient TPS experience improved service quality due to reduced processing time and enhanced accuracy.

In commercial banks, TPS also play a vital role in ensuring service continuity and reliability. Customers expect uninterrupted access to banking services, particularly electronic services such as ATM withdrawals and electronic transfers. When TPS are efficient and reliable, banks can meet these expectations, resulting in improved service delivery and customer satisfaction. Conversely, system failures, network downtimes, or slow transaction processing can disrupt services, leading to customer dissatisfaction and loss of trust (Ololade & Ogbeide, 2017).

Furthermore, TPS contribute to internal control and accountability within banks. By maintaining accurate transaction records, these systems support audit trails, fraud detection, and regulatory compliance. Regulatory bodies require banks to maintain detailed transaction records, and TPS facilitate compliance by ensuring that transaction data are stored securely and can be retrieved when needed (Sadiq et al., 2020). This is particularly important in the Nigerian banking environment, where regulatory oversight is stringent.

In summary, transaction processing systems are indispensable to service delivery in commercial banks. They enable fast, accurate, and reliable processing of routine banking transactions, enhance customer satisfaction, and support regulatory compliance. In locations such as Yenagoa, where customers increasingly rely on electronic banking services, the effectiveness of TPS directly influences the quality of service delivery and overall banking performance.

Decision Support Systems (DSS)

Decision Support Systems (DSS) are interactive information systems designed to support managerial decision-making by providing relevant data, analytical tools, and models. Unlike transaction processing systems, which focus on routine operational activities, DSS assist managers and decision-makers in solving semi-structured and unstructured problems. In commercial banks, DSS are used to support decisions related to credit approval, risk management, customer service improvement, and strategic planning (Laudon & Laudon, 2020).

In the banking sector, decision support systems integrate data from various sources, including transaction databases, customer information systems, and external economic data, to provide meaningful insights. These systems enable bank managers to analyze trends, forecast outcomes, and evaluate alternative courses of action. For example, DSS can be used to assess customer

transaction patterns to improve service delivery, reduce waiting time, and allocate resources efficiently across bank branches (Turban et al., 2021).

Decision support systems play a significant role in enhancing service delivery in commercial banks by improving the quality and speed of managerial decisions. When managers have access to accurate and timely information, they are better positioned to respond to customer needs, resolve service challenges, and design customer-centric banking solutions. Studies have shown that effective use of DSS improves organizational responsiveness and service quality, particularly in service-oriented industries such as banking (O'Brien & Marakas, 2019).

In commercial banks operating in Yenagoa, DSS can support decisions related to service delivery improvement, such as determining optimal staffing levels, identifying peak transaction periods, and evaluating the performance of electronic banking channels. By analyzing data generated from transaction processing systems, DSS provide actionable insights that help banks reduce service bottlenecks and enhance customer experience. This highlights the complementary relationship between TPS and DSS in achieving efficient service delivery.

Another important function of DSS in banking is risk management. Banks use DSS to assess credit risk, monitor loan performance, and evaluate customer creditworthiness. Effective risk assessment helps banks make sound lending decisions, reduce non-performing loans, and maintain financial stability. These outcomes indirectly improve service delivery by ensuring that banks remain reliable and capable of meeting customer needs (Sadiq et al., 2020).

Service Delivery

Service delivery refers to the process of delivering services to customers in an efficient, effective, and timely manner. In the context of IS, service delivery encompasses the technologies, processes, and systems that organizations use to deliver services to their customers. Effective service delivery is key to customer satisfaction, business performance, and competitive advantage.

Advancements in technology have led to new models of service delivery. For example, self-service portals and chatbots have empowered customers to resolve issues on their own, reducing the need for human intervention. Cloud-based services have made it easier for businesses to scale their operations and offer 24/7 service availability without significant investments in physical infrastructure.

The use of artificial intelligence (AI) in service delivery has become increasingly important. AI-powered systems can analyze large volumes of data and provide real-time solutions, such as personalized recommendations, customer support, and automation of repetitive tasks. In industries like e-commerce and healthcare, AI-driven service delivery models are improving operational efficiency and enhancing user experience.

Theoretical Review

Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), developed by Davis (1989), is one of the most widely used frameworks for understanding the adoption of new technologies in organizations. TAM posits that two primary factors—perceived ease of use (PEOU) and perceived usefulness (PU)—influence users' decisions to adopt new technologies. Perceived ease of use refers to the degree to which a user believes that using a particular technology will be free from effort, while perceived usefulness refers to the extent to which the technology is perceived as improving the user's job performance.

TAM has been widely applied to Information Systems and technology adoption studies. For example, Venkatesh and Davis (2000) expanded TAM by incorporating additional variables, such as social influence and facilitating conditions, leading to the development of the Unified Theory of Acceptance and Use of Technology (UTAUT). TAM's core assumption that ease of use and usefulness influence adoption remains central in many IS studies.

However, while TAM has provided valuable insights, critics argue that it does not take into account other factors, such as organizational culture, external pressures, or the complexity of the technology being adopted. Moreover, TAM has been critiqued for being too focused on the individual user's perspective, rather than examining organizational or environmental factors that could influence technology adoption (Bagozzi, 2007).

Empirical Review

AlShihi (2020) conducted a study on IS implementation in small and medium enterprises (SMEs) in the Middle East. The study identified several barriers to successful IS implementation, such as resistance to change, lack of technical expertise, and inadequate training. However, the study also found that successful IS implementation in SMEs resulted in improved decision-making, enhanced organizational efficiency, and the ability to compete with larger firms.

The research highlighted the importance of aligning business processes with IS design to ensure successful implementation. Organizations that invested in employee training and provided continuous support were more likely to experience successful adoption of new technologies.

Jensen & O'Hara (2019) examined how hardware innovations, specifically cloud computing, have impacted the operations of businesses. They found that cloud computing allowed organizations to access enterprise-level hardware resources without significant upfront investment. This shift enabled businesses to scale their operations more efficiently and reduce hardware-related costs.

The study also emphasized the role of specialized hardware, such as AI chips, in driving technological advancements and enhancing data processing capabilities. Organizations leveraging advanced hardware technologies were able to offer faster, more reliable services to their customers.

McKenna (2018) investigated the impact of agile software development methods on service delivery in technology companies. The study found that agile methodologies, which prioritize flexibility and continuous improvement, led to faster development cycles and better alignment with customer needs. Organizations that adopted agile practices were able to deliver software updates more frequently, resulting in enhanced service delivery and greater customer satisfaction. The research concluded that agile software development has a positive impact on both software quality and service delivery efficiency.

Garcia et al. (2021) explored the adoption of IS in healthcare organizations, particularly focusing on the integration of electronic health records (EHR). The study found that while EHR systems improved patient care and streamlined administrative tasks, challenges such as resistance from healthcare professionals, data security concerns, and the high cost of implementation remained significant barriers. Despite these challenges, the study concluded that the long-term benefits of EHR systems, including improved patient outcomes and reduced healthcare costs, outweighed the initial difficulties.

Khin & Aung (2020) examined the role of software in enhancing customer satisfaction on e-commerce platforms. The study found that responsive service delivery systems, such as chatbots and self-service options, were critical in improving customer satisfaction. Additionally, personalized software applications helped e-commerce companies improve user experience and increase customer retention rates. The study emphasized that service delivery models based on AI and automation could improve efficiency, reduce human error, and provide more personalized experiences for users.

Liu & Xu (2022) studied the adoption of cloud computing among small businesses in China. The research found that cloud computing had a significant positive impact on service delivery, enabling small businesses to access enterprise-level software solutions without the need for large capital investments. Cloud-based solutions provided enhanced flexibility, scalability, and cost-effectiveness, allowing small businesses to compete more effectively with larger enterprises.

Methodology

This study adopts a cross-survey research design to examine the effect of information systems on service delivery in commercial banks in Yenagoa, Bayelsa State. The design is considered appropriate because it enables the collection of primary data from bank employees and customers to assess their perceptions of information system usage and service delivery outcomes.

The population of the study comprises staff of selected commercial banks operating in Yenagoa, Bayelsa State. A sample size seventy-eight (78) was drawn from the population using a simple random sampling technique to ensure equal representation and reduce sampling bias. Data for the study are collected through a structured questionnaire designed to capture information on transaction processing systems, decision support system, and service delivery. The questionnaire items are measured using a five-point Likert scale, ranging from strongly agree to strongly disagree.

The validity of the instrument is ensured through expert review, while the reliability is determined using the Cronbach's Alpha method with a value of 0.82. Data collected are analysed using descriptive statistics percentage, frequency and mean value) and inferential statistics adopted is Pearson Moment Correlational Coefficient, to test the relationship between transaction processing system, decision support systems and service delivery.

Analysis, Results and Discussions

From the administered questionnaire 84 was retrieved and valid and used for the analysis representing over 70% of the administered questionnaire

Univariate Analysis of the Variables

Table 1 Descriptive Result on Transaction Processing System.

S/N	Question Items	SA (5)	A (4)	MA (3)	D (2)	SD (1)	AGG SCORE	X
1	Organization ensures that there is quick information flow across all departments through MIS	35 (41.6)	20 (23.8)	9 (10.7)	14 (16.6)	6 (7)	316	3.7
2	Information system is helpful in quick transaction process	59 (70)	14 (16.6)	6 (7)	4 (4.7)	1 (1)	378	4.5
3	I perform multiple transaction all at using information system	28 (33)	25 (29.7)	6 (7)	15 (17.8)	10 (11.9)	298	3.5
4	Transaction between clients is effective with the use of information system	25 (29.7)	18 (21)	6 (7)	20 (23.8)	15 (17.8)	270	3.2
5	Transaction within the organization is effective with information system	18 (21)	5 (5.9)	15 (17.8)	35 (41.6)	11 (13)	236	2.8

Source: Survey Data, 2024. *All figures in parenthesis are %*

Table 1 above shows the descriptive result based on the responses of respondents on the extent to which transaction processing system is experienced as a component of business information system. Table 4.6 shows that the first question item with mean score 3.7, shows respondents agree that the firm ensures that there is quick information flow across all in the option scale. Second question item has a mean score of 4.5, this indicates that respondents strongly agreed that information system is helpful in quick transaction process. Third question item with a mean score

of 3.5, indicates that respondents agree that they perform multiple transaction all at using information system. Fourth question item has a mean score of 3.2, this shows that the respondents agreed that transaction between clients is effective with the use of information system. And fifth question items with mean score of 2.8, indicates that respondents moderately agree that transaction within the organization is effective with information system.

Table 2: Descriptive Result on Decision Support System

S/N	Question Items	SA (5)	A (4)	MA (3)	D (2)	SD (1)	AGG SCORE	X
1	Management Information System is helpful in Making Decision Timely & Efficiently to get the project done	28 (33)	25 (29.7)	6 (7)	15 (17.8)	10 (11.9)	298	3.5
2	Management Information System helps to make Decision Timely to become Market Leader	25 (29.7)	10 (11.9)	30 (35.7)	15 (17.8)	4 (4.7)	289	3.4
3	Information system help in ensuring effective decision	47 (55.9)	20 (23.8)	8 (9.5)	6 (7.1)	3 (3.5)	354	4.2
4	Quick decision making is enhance through information system	15 (17.8)	20 (23.8)	20 (23.8)	15 (17.8)	14 (16.6)	259	3.0
5	Information system help analyse multiple decision and pick put the most effective one	38 (84.2)	15 (17.8)	5 (5.9)	25 (29.7)	1 (1.1)	316	3.7

Source: Survey Data, 2025. *All figures in parenthesis are %*

Table 2 above shows the descriptive result based on the responses of respondent on the extent of which decision support system is experienced as a component of business information system. For question 1, the mean score is 3.5, this shows that management information system is helpful in Making Decision Timely & Efficiently to get the project done. The second question item has a mean score of 3.4, which indicates that management information system helps to make decision timely to become market leader. Third question item with a mean score of 4.2, shows that the respondent strongly agrees that information system help in ensuring effective decision. Question item 4 has a mean score of 3.0 indicates that respondents agree that quick decision making is enhance through information system. Finally, the fifth question item with a mean score 3.7, reflect that the respondents agree that information system help analyse multiple decision and pick put the most effective one.

Table 3: Descriptive Result on Service Delivery

S/N	Question Items	SA (5)	A (4)	MA (3)	D (2)	SD (1)	AGG SCORE	X
1	Information System is helpful in increasing	25 (29.7)	10 (11.9)	4 (4.7)	30 (35.7)	15 (17.8)	252	3.0

	production of products and services							
2	Information System reduce the Operational cost of the organization.	30 (35.7)	25 (29.7)	10 (11.9)	15 (17.8)	4 (4.7)	314	3.7
3	Information System helps to make continuous growth of organization	19 (22.6)	15 (17.8)	10 (11.9)	25 (29.7)	15 (17.8)	250	2.9
4	Business information system helps in playing role to achieve competitive environment.	25 (29.7)	10 (11.9)	5 (5.9)	30 (35.7)	14 (16.6)	254	3.0
5	Information System it provides easy access to information for the customers.	40 (47.6)	20 (23.8)	14 (16.6)	6 (7.1)	4 (4.7)	338	4.0

Source: Survey Data, 2025. *All figures in parenthesis are %*

Table 3 above shows descriptive result based on the responses of respondents on the extent to which productivity is displayed among employees in the studied organization. For question item 1, the mean score is 3.0, this simply means that the respondents agree that information system is helpful in increasing production of products and services. The second question item with the mean score of 3.7, indicates that information system reduce the operational cost of the organization. The third question item, shows that the dec information system helps to make continuous growth of organization, this is shown with a mean score of 2.9 which falls on the moderately agree range of the scale. The fourth question item with a mean score of 3.0 indicates that business information system helps in playing role to achieve competitive environment. Finally, the fifth question item has a mean of 4.0, which indicates that respondents strongly agreed that information system it provides easy access to information for the customers.

Bivariate Analysis

Table 4: Correlation Matrix between Transaction Processing Systems and Service Delivery in commercial banks in Yenagoa, Bayelsa State

		Transaction Processing Systems	Service Delivery
Transaction Processing Systems	Pearson Correlation	1	.612**
	Sig. (2-tailed)		.000
	N	84	84
Service Delivery	Pearson Correlation	.612**	1
	Sig. (2-tailed)	.000	
	N	84	84

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

Source: Survey Data (2025) via SPSS Version 23 Output

The correlation matrix shows a positive and significant relationship between Transaction Processing Systems (TPS) and Service Delivery in commercial banks in Yenagoa, Bayelsa State, with a Pearson correlation coefficient of 0.612 ($p < 0.01$). This indicates that as the effectiveness of TPS increases, so does the quality of service delivery in these banks. The statistically significant correlation suggests that TPS plays a crucial role in enhancing the efficiency and reliability of services provided by commercial banks. This finding is consistent with empirical studies, such as those by AlShihi (2020) and Jensen & O'Hara (2019), which have shown that robust TPS can

streamline banking operations, improve customer satisfaction, and facilitate faster, more accurate transactions. Additionally, studies on IS implementation in service industries, like those by McKenna (2018), have highlighted the positive impact of advanced technological systems on service delivery, reinforcing the importance of TPS in enhancing operational performance.

Table 5: Correlation Matrix between Decision Support Systems and Service Delivery in commercial banks in Yenagoa, Bayelsa State

		Decision Support Systems	Service Delivery
Decision Support Systems	Pearson Correlation	1	.417**
	Sig. (2-tailed)		.000
	N	84	84
Service Delivery	Pearson Correlation	.417**	1
	Sig. (2-tailed)	.000	
	N	84	84

**. Correlation is significant at the 0.01 level (2-tailed)
Source: Survey Data (2025) via SPSS Version 23 Output

The correlation matrix reveals a moderate positive and statistically significant relationship between Decision Support Systems (DSS) and Service Delivery in commercial banks in Yenagoa, Bayelsa State, with a Pearson correlation coefficient of 0.417 ($p < 0.01$). This suggests that an improvement in the use of DSS is associated with enhanced service delivery in these banks. The positive correlation implies that DSS, which aid in decision-making processes by providing critical insights, contribute to the efficiency and effectiveness of service provision. This finding aligns with empirical studies such as those by Garcia et al. (2021), who highlighted the role of decision support tools in improving organizational decision-making and service delivery, particularly in sectors like banking. Furthermore, similar findings by McKenna (2018) and AlShihi (2020) support the notion that advanced technological systems, including DSS, positively influence service quality by enabling more informed, timely decisions.

Conclusion

This study aimed to examine the relationship between information systems, specifically Transaction Processing Systems (TPS) and Decision Support Systems (DSS), and service delivery in commercial banks in Yenagoa, Bayelsa State. The findings revealed that both TPS and DSS have significant positive correlations with service delivery, with TPS showing a stronger relationship. This implies that efficient and effective information systems, particularly TPS, play a crucial role in improving the quality and efficiency of service delivery in the banking sector. The study highlights the importance of leveraging these systems to enhance operational processes and improve customer satisfaction, aligning with existing literature that emphasizes the positive impact of technological systems on service delivery in financial institutions.

Recommendations

1. Given the strong relationship between TPS and service delivery, banks in Yenagoa should invest in upgrading their TPS infrastructure to ensure faster, more accurate transactions. This will not only streamline operations but also enhance the overall customer experience, reducing wait times and minimizing errors in banking services.

2. While the correlation between DSS and service delivery is moderately significant, it is essential for banks to incorporate advanced DSS tools to support data-driven decision-

making. This could improve service delivery by providing timely, accurate insights that enable more informed decisions regarding customer needs and service offerings.

Contribution to Knowledge

This study contributes to knowledge by providing empirical evidence of the relationship between information systems (TPS and DSS) and service delivery in the context of commercial banks in Yenagoa, Bayelsa State. It underscores the importance of advanced information systems in enhancing the operational efficiency and quality of services offered by banks. The study adds to existing literature by offering insights into how specific types of information systems, such as TPS and DSS, impact service delivery in the banking sector, especially in the Nigerian context. The findings also serve as a guide for banks looking to leverage technology to improve customer satisfaction and overall service performance.

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