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EFFECT OF DIGITAL CURRENCY (ENAIRA, BITCOIN AND ETHEREUM) ON EFFICIENCY IN FINANCIAL TRANSACTIONS IN NIGERIA

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Abstract: The study investigated the effect of digital currency on financial transactions in Nigeria, using, eNaira, Bitcoin and Ethereum to enhance efficiency in financial transactions in Nigeria. The study adopted descriptive survey research design. The instrument for data collection was a structured questionnaire. The study employed descriptive and inferential analytical procedures. Pearson correlation analysis was utilized in the test of the hypothesis. The findings revealed that the use of digital currencies significantly enhances efficiency in financial transactions in Nigeria In conclusion, integrating digital currencies into the financial system can lead to faster and more streamlined transactions, reduce opportunities for fraud and improve the clarity of financial records, and extend financial services to underserved and remote areas. On this note, the study recommended that financial institutions in Nigeria should integrate digital currencies, such as eNaira, Bitcoin, and Ethereum, into their systems to enhance the efficiency of financial transactions which will help streamline transaction processes, reduce processing times, and improve overall service delivery.

Keywords: Digital currency, Efficiency and Financial transactions

Introduction

The introduction of the eNaira aims to slow the outflow of capital into emerging markets and replace unregulated digital currencies like crypto currencies on the financial market. This move enhances payment prospects in retail transactions, serving as both a means of exchange and a store of value (Genc & Takagi, 2024). Also, the eNaira fosters financial inclusion by targeting the unbanked and underbanked populations in Nigeria. Given the country's low level of financial inclusion, the eNaira provides an avenue for fintech companies to serve previously excluded individuals and businesses. This focus on the financially excluded segments of the population contributes to broader economic development and growth by expanding access to financial services and promoting digital transactions. Moreover, the eNaira's emergence underscores the changing domain of financial technology (fintech) in Nigeria. The eNaira's integration into the financial ecosystem not only modernizes payment systems but also propels Nigeria towards becoming a hub for fintech advancements, enhancing efficiency, transparency, and accessibility in financial transactions (Ofodile, Odeyemi, Okoye, Addy, Oyewole, Adeoye & Ololade, 2024).

One of the most apparent effects of digital currency on financial transactions in Nigeria is the decentralization of financial transactions (Esoimeme, 2023). Digital currencies operate on blockchain technology, a decentralized ledger system that eliminates the need for intermediaries such as banks or financial institutions (Mpofu, 2024). This decentralization empowers individuals to conduct peer-to-peer transactions seamlessly, bypassing traditional banking channels. In Nigeria, where access to banking services is limited in certain regions and bureaucratic hurdles often hinder financial inclusion, digital currency offers a promising alternative for facilitating transactions (Oludare, Olanrewaju & Ekundayo, 2024). However, this decentralization also poses challenges for accounting practices, as traditional frameworks may struggle to adapt to the complexities of digital currency transactions (Alora, Sahoo & Sasidharan, 2024).

Furthermore, digital currency has the potential to enhance financial inclusion in Nigeria, particularly for the unbanked and under banked population. According to the World Bank, around 60% of Nigeria's adult population is unbanked, largely due to factors such as limited access to banking infrastructure, high transaction costs, and lack of documentation. Digital currencies offer a viable solution to these challenges by providing a low-cost, accessible means of conducting financial transactions (Alora, Sahoo & Sasidharan, 2024). For example, individuals can use mobile phones to access digital currency wallets and send or receive payments without the need for a traditional bank account. This increased accessibility can empower marginalized communities, stimulate economic activity, and contribute to poverty alleviation efforts in Nigeria.

While digital currency offers opportunities for financial inclusion, innovation, and economic empowerment, it also presents challenges related to regulatory oversight, volatility, and accounting treatment (Oyedeko & Gbadebo, 2024). As Nigeria keys into digital finance, policymakers, regulatory authorities, and accounting professionals must collaborate to develop robust frameworks that balance innovation with risk mitigation, ensuring the integrity and stability of the financial system. Only through proactive measures and strategic planning can Nigeria harness the potential of digital currency to drive inclusive growth and sustainable development in the years to come (Esoimeme, 2023). This study is carried out against the above background to examine the effect of digital currency on financial transactions in Nigeria.

This study therefore sought to ascertain the effect of digital currency (eNaira, Bitcoin and Ethereum) on enhances efficiency in financial transactions in Nigeria.

Literature Review

Digital Currencies

However, the adoption of digital currencies also presents challenges and risks (Kang, 2024). Regulatory concerns, security issues, and the potential for misuse in illegal activities are significant considerations for governments and financial institutions. Despite these challenges, the growing interest in digital currencies suggests a shift towards a more digital and decentralized financial system (Fepetu & Adewumi, 2024). As technology continues to evolve, digital currencies are likely to play an increasingly important role in the global economy, offering new opportunities for innovation and financial inclusion (Genc & Takagi, 2024).

E-naira

Enaira leverages blockchain technology to ensure the security and integrity of transactions (Oludare, Olanrewaju & Ekundayo, 2024). Blockchain, a distributed ledger technology, allows for transparent and tamper-proof recording of all Enaira transactions, providing a high level of security against fraud and

counterfeiting (Ozili, 2023). Additionally, the use of blockchain technology enables faster settlement times for transactions, reducing the time and costs associated with traditional banking processes. This increased efficiency can benefit both consumers and businesses by facilitating quicker and more reliable payment processing.

The CBN has implemented strict regulatory measures to govern the use of Enaira, ensuring compliance with existing financial regulations and safeguarding against potential risks such as money laundering and cyber threats. Users of Enaira are required to undergo a verification process to establish their identity, thereby enhancing the security and traceability of transactions (Obianwu & Okwor, 2023). This regulatory oversight aims to build trust and confidence in Enaira as a legitimate and reliable form of digital currency. Enaira also holds the potential to drive innovation within the Nigerian financial sector (Alora, Sahoo & Sasidharan, 2024). By providing a digital platform for payments and transactions, it encourages the development of new financial products and services that leverage digital currency technology. This innovation can stimulate economic growth and create new opportunities for businesses and entrepreneurs. Moreover, Enaira's digital infrastructure can support the broader digital economy, enabling seamless integration with other digital services and platforms (Oludare, Olanrewaju & Ekundayo, 2024).

Bitcoin's

Bitcoin's adoption has grown significantly since its inception, with a wide range of businesses and individuals using it for various purposes (Ducrée, 2022). It is accepted as a form of payment by numerous merchants and service providers, both online and offline. Additionally, Bitcoin has become a popular asset for investors seeking diversification and potential returns in the rapidly evolving cryptocurrency market (Kaur, Lekhi & Popli, 2024). Despite its volatility, Bitcoin's market capitalization has grown substantially, establishing it as a major player in the global financial landscape.

However, Bitcoin's decentralized and pseudonymous nature has also attracted regulatory scrutiny and concerns over its use in illegal activities, such as money laundering and tax evasion (Onyekwere, Ogwueleka & Irhebhude, 2023). Governments and regulatory bodies worldwide are grappling with how to effectively regulate and oversee Bitcoin and other cryptocurrencies to prevent misuse while fostering innovation and protecting consumers (Ducrée, 2022). The ongoing regulatory developments and the evolving technological landscape will continue to shape Bitcoin's role and impact in the global economy.

Ethereum's

Ethereum's blockchain supports decentralized applications (DApps), which are applications that run on a decentralized network rather than a centralized server. DApps leverage Ethereum's smart contract functionality to provide decentralized, secure, and transparent solutions across various sectors (Chimezie & Inimgba, 2022). Examples of popular DApps include decentralized finance (DeFi) platforms, which offer financial services such as lending, borrowing, and trading without traditional financial intermediaries, and non-fungible token (NFT) marketplaces, which allow for the creation, buying, and selling of unique digital assets.

Ether (ETH), the native cryptocurrency of the Ethereum network, plays a crucial role in its ecosystem (Ademosu & Ayodele, 2023). It is used to compensate participants who validate transactions and execute smart contracts, serving as "fuel" for the network's operations. Users must pay ETH to deploy and interact with smart contracts, which helps prevent spam and misuse of computational resources. ETH can also be traded, held as an

investment, or used to participate in various Ethereum-based services and applications (Chimezie & Inimgba, 2022).

Ethereum's innovation and flexibility have made it one of the most influential platforms in the blockchain and cryptocurrency space (Ademosu & Ayodele, 2023). Its ongoing development, including the transition to Ethereum 2.0, aims to enhance scalability, security, and sustainability through the implementation of a proof-of-stake consensus mechanism and other improvements. As Ethereum continues to evolve, it is poised to play a pivotal role in the future of decentralized technology and the broader digital economy.

Financial transactions

Financial transactions are subject to various regulations and standards designed to ensure their integrity, security, and compliance with legal requirements (Begenau & Landvoigt, 2022). Regulatory frameworks aim to prevent fraud, money laundering, and other illicit activities, while protecting consumers and maintaining the stability of the financial system. Technological advancements, such as real-time payments, blockchain, and biometric authentication, continue to transform the landscape of financial transactions, driving innovation and improving the efficiency and security of financial services. Thus, financial transactions are the cornerstone of economic activity, enabling the exchange of value and supporting the flow of resources within the economy. The evolution from cash-based to electronic and digital transactions reflects the ongoing advancements in technology and the increasing demand for secure, efficient, and accessible financial services. As the financial ecosystem continues to evolve, the nature of financial transactions will likely continue to transform, driven by innovations in technology, regulatory developments, and changing consumer preferences.

Efficiency in Financial Transactions

Efficiency in financial transactions refers to the ability to execute transactions quickly, accurately, and cost-effectively, minimizing delays, errors, and unnecessary expenses (Wu, Bai & Chen, 2023). In the context of financial systems, efficiency is crucial for maintaining the smooth flow of capital, reducing operational costs, and enhancing the overall user experience for both consumers and businesses. Achieving high efficiency in financial transactions involves leveraging advanced technologies, optimizing processes, and implementing robust regulatory frameworks to ensure that transactions are conducted in the most effective manner possible.

One key aspect of efficiency in financial transactions is the speed at which they are executed. Faster transaction processing times mean that funds can be transferred and settled more quickly, reducing the time it takes for parties to access their money and complete their financial activities (Mann, 2023). This is particularly important in today’s fast-paced global economy, where delays in financial transactions can have significant negative impacts on cash flow, investment opportunities, and overall economic activity (Wu, Bai & Chen, 2023). Technologies such as real-time payments systems, blockchain, and high-frequency trading platforms have greatly enhanced the speed of financial transactions, enabling near-instantaneous transfers and settlements.

Cost-effectiveness is also a vital aspect of transaction efficiency. Lowering the costs associated with executing financial transactions can provide significant benefits to both consumers and businesses. Traditional financial transactions often involve fees charged by banks, payment processors, and other intermediaries. By streamlining processes and adopting more efficient technologies, such as digital currencies and blockchain, the financial industry can reduce these costs, making transactions more affordable for all participants (Wu, Bai & Chen,

2023). This cost reduction can also facilitate greater financial inclusion, allowing more individuals and businesses to access and benefit from financial services.

Empirical Review

Fepetu and Adewumi (2024) appraised the determinants of digital currency usage in Nigeria, focusing on factors such as financial knowledge, perceived value, and perceived convenience. Using a survey research design, data was collected through questionnaires from 218 respondents. The study found through correlational analysis that financial knowledge had a favorable but insignificant relationship with digital currency usage in Nigeria. However, perceived value and perceived convenience both showed positive and significant relationships with digital currency usage. The study concluded that these three factors are crucial for improving digital currency usage in Nigeria. It recommended strong awareness campaigns and publicity to enlighten the general public about the benefits and convenience of digital currencies.

Mpofu (2024) assessed the readiness of African countries for the issuance of digital currencies, providing an overview of the countries that have implemented or are considering digital currencies. The paper discussed the issues necessary for creating a conducive environment for digital currencies and explored the opportunities and challenges of developing and issuing them in Africa. Qualitative analyses wad used in the study. It found that while Africa's developed mobile money network, high mobile money penetration, digital economy growth, and financial exclusion position it well for CBDC adoption, several challenges need addressing. These include lower levels of financial inclusion, digital exclusion, poor digital infrastructure, and regulatory uncertainty. The paper recommended creating a legal and regulatory framework for digital currencies, investing in digital infrastructure, improving internet connectivity, and educating citizens about digital currencies, which could lead to economic growth, increased cross-border payments, financial inclusion, and sustainable development.

An, Wang, Yan, and Ma (2024) examined consumer adoption of the electronic Chinese yuan (e-CNY) using the technology acceptance model (TAM) and emotional design principles. The findings from the qualitative analysis conducted suggest that perceived usefulness, ease of use, credibility, and emotional design influence consumers' willingness to use e-CNY. Data from 28 pilot projects show that these factors are affected by herd behavior and socioeconomic status. The findings can guide government strategies for promoting digital currency and help businesses capitalize on market opportunities created by new technologies.

ladipupo, Oyedokun, and Nesiama (2023) examined the impact of the crypto currency ban on trades and crypto currency traders in Nigeria from a liberalist perspective of international relations. Using a descriptive survey research design, data were gathered from 165 bankers, university lecturers, and crypto traders through structured questionnaires. Analyzed using descriptive statistics, the findings revealed that while the crypto currency ban has reduced virtual buying and selling of goods and services within Nigeria, it has no significant consequences on domestic and international trade. However, the ban has negatively impacted Nigerian digital currency traders. The study recommends that the government should modify the laws governing crypto currency to protect digital traders and the economy.

Sunday and James (2023) investigated the influence of the Central Bank Digital Currency (CBDC) e-Naira policy on financial inclusion, specifically its impact on access to and usage of financial services among lecturers and students in Colleges of Education in Kano State. Adopting a descriptive survey method, a sample of 279 was selected using simple random sampling techniques from a population of 989 individuals from three public

Colleges of Education in Kano State. Data were collected through a 4-point Likert scale questionnaire and analyzed using mean and standard deviation with SPSS. The study found that the CBDC (e-Naira) policy does not significantly influence access to financial services for lecturers and students, nor does it significantly impact their usage of financial services.

Akindipe, Akhimie, and Olonade (2023) evaluated the awareness, understanding, and receptiveness of the eNaira in Nigeria. The study aimed to examine the evolution and understanding of the eNaira, its impact on Nigeria's emerging economy, and how increased awareness could enhance financial inclusion. A survey research design was employed, with primary data collected from 33 banks involved in the eNaira platform. The sample included 10 banks actively participating in eNaira operations, and 120 questionnaires were administered to respondents from these banks. Descriptive statistics were used to analyze the data, and regression analysis tested the hypotheses. The results indicated low levels of awareness, understanding, and receptiveness in Nigeria. The initiative had not progressed beyond the initial wave of early adopters, with retail client participation below 1% of active bank accounts. The study recommended that CBDC could act as a catalyst for financial inclusion in Nigeria, which lags in mobile money penetration. It emphasized the need for banks to develop CBDC technology models compatible with other systems to enhance coordination and information sharing among central banks, maximizing the benefits of this new technological innovation.

Onyekwere, Ogwueleka, and Irhebhude (2023) investigated the adoption and sustainability of Bitcoin and blockchain in Nigeria. Using a non-probability purposive sampling technique, the study collected 320 responses via an online survey. The data was analyzed using descriptive and correlational methods in IBM SPSS version 25. The findings revealed that Bitcoin is the most popular cryptocurrency, with a 97.5% acceptance rate, and is expected to remain the leading virtual currency over the next five years. The research aims to help researchers and authorities understand the need for cryptocurrency adoption, contributing to its sustainability.

Ademosu and Ayodele (2023) highlighted the dynamic connection between digital currency and Nigeria's economic growth, focusing on Bitcoin, Ethereum, and Litecoin in terms of their returns and volatility from 2010Q4 to 2022Q3. Using the ARDL model and Granger causality test for robust estimations, the study found that the country's exchange rate trends aligned with digital currency activities, impacting Nigeria's economic growth rate. Lower returns for Bitcoin and Litecoin were associated with increased growth rates, while returns for Ethereum moved in the same direction as the growth rate. This suggests that Nigerians engaged in digital currency often diversify their portfolios among available coins. Additionally, the study found that low market volatility, particularly for Ethereum, significantly raises economic growth rates, with causal implications running from coin returns and volatilities to growth and exchange rates.

Adegbite and Aremu (2022) determined the determinants of eNaira adoption in Nigeria and its economic impact. Data were collected randomly from bank staff, economists, and Nigerians through questionnaires and analyzed using MANOVA, correlation, chi-square, and Cronbach’s Alpha statistics for reliability. The study concluded that eNaira will significantly positively affect Nigeria's economy in terms of employment generation, economic stability, transaction facilitation, money security, direct welfare disbursements, increased revenue and tax collection, reduced cash processing costs, resilient payment system support, improved Central Bank currency usability, and enhanced economic activities. The eNaira will serve as a medium of exchange, a secure store of value, and a stable unit of account. It is recommended that a validation scheme, centralized or decentralized, be established to prevent double spending or identity theft of eNaira codes. Additionally, the

government should educate the public on the importance of this development; ensuring citizens understand the difference between cash deposits in bank accounts and eNaira in digital wallets. A program organized by the Central Bank of Nigeria (CBN) should further deepen the enlightenment about eNaira across the country.

Aminu, Hayewa, Mohammed, and Abubakar (2022) investigated the structural effect of digital currency and monetary policy on economic growth in Nigeria using a Structural Vector Autoregressive (SVAR) Model for the period 2013Q1 to 2020Q4. The data properties were first checked to avoid spurious regression and model misspecification using the ADF and PP unit-root tests. The findings demonstrated that all variables are integrated at the order of zero (I (0)) and that digital currency has no significant impact on economic growth. However, monetary policy variables, such as money supply and monetary policy rate, do have shock effects on economic growth in Nigeria. A shock to the money supply has a significantly positive impact on economic growth, while the response of economic growth to one unit standard deviation shock to the monetary policy rate is negative and insignificant. This implies that the monetary policy rate does not significantly impact economic growth in Nigeria. The study recommends that the monetary policy rate be reduced to encourage investment and propel economic growth. Nigerian monetary authorities should expedite actions towards effective monetary control, which can be achieved through efficient money supply regulatory measures.

Chimezie and Inimgba (2022) examined the impact of cryptocurrencies on the global financial market from 2005 to 2021. The global financial market was proxied by international liquidity, while crypto currencies were represented by Bitcoin, Ethereum, Tether, and Binance Coin. Questionnaires were distributed to investors in crypto currencies and the global financial market, with a sample size of 1,500. The raw data were scaled using the Linkel method for econometric analysis. The researchers employed econometric techniques such as Box Jenkins Q Statistic and the EGARCH model to examine the linear dependency and volatility rate of cryptocurrencies in the global financial market. The test results revealed the absence of linear dependency and an increase in the exponential volatility rate of the crypto currencies.

Methodology

Research Design

The study adopted a descriptive survey research design to examine the influence of digital currency on financial transactions in Nigeria. This design was chosen because it enables the examination of social phenomena through surveys of people's opinions, making it suitable for collecting and analyzing the required data. By using questionnaires, the study effectively solicited responses needed for thorough analysis and inference.

Population of the Study

To ensure the study is research-based, it targets all 772 professionally affiliated accountants in Anambra State (Iliemena & Uagbale-Ekatah, 2023). This group was selected for their familiarity with and expertise in both financial accounting and digital currencies.

Sample Size of the Study

Applying the approach of Taro-Yamane (1967) formula at a confidence level of 90% gave the sample size of eighty-nine (89). The Taro-Yamane formula was calculated as:

$$n = \frac{772}{1 + 772\,(0.1)^2}$$

$$n = 89$$

Convenience sampling technique was used in assessing the sample respondents. This was because of the online method of data collation adopted.

Method of Data Collection

Instrument of Data Collection

Since the study relies on primary data, the instrument for data collection is a structured questionnaire. The researcher developed this structured questionnaire to serve as constructs for the research variables. The

questionnaire is divided into two sections: Section A and Section B. Section A captures the bio-data information of the respondents, while Section B contains items that measure the research variables. Responses are weighted using a 5-point Likert scale as follows: 5 = Strongly Agree, 4 = Agree, 3 = Undecided, 2 = Disagree, and 1 = Strongly Disagree. The research instrument was distributed via online platforms.

Validity of the Research Instrument

The validity of a research instrument is the ability of the research instrument to measure what are purports to measure. The Research Supervisor gave both *face* and *content* validity to the research instrument.

Reliability of Research Instrument

Reliability of a research instrument refers to the degree to which the instrument consistently produces the same results each time it is used. The reliability of the study was assessed using Cronbach's alpha statistics, following a pilot study conducted in the Awka metropolis. Table 3.1 below presents the Cronbach's alpha coefficient.

Table 1: Coefficient of Cronbach's Alpha

Construct	Cronbach's Alpha
Use of digital currency and financial transactions in Nigeria	0.922

Source: SPSS Version 25.

The Cronbach's alpha analysis indicates high reliability of the research instrument, as the calculated value is 0.922, surpassing the minimum recommended threshold of 0.7.

Method of Data Analyses

The study processed and coded the collected data into SPSS Version 25 for analysis. Both descriptive and inferential analytical procedures were undertaken. For the descriptive analysis, tools such as percentage, and frequency distribution were employed to summarize the data collected, providing a clear overview of the respondent demographics and other key variables. Inferential analysis was also conducted to test the hypotheses of the study. Specifically, correlation analysis was utilized to examine the relationships between the variables and to draw inferences regarding the hypotheses. This dual approach ensured a comprehensive understanding of the data and facilitated robust hypothesis testing.

Decision Rule

The study carried out a correlational analysis at 5% significance level. The decision rule is that the null hypothesis is rejected while the alternate hypothesis is accepted if the *p*-value is less than 0.05. Otherwise, the alternate hypothesis is rejected in favour of the alternate hypothesis.

Data analysis and Result

Analysis of Research Question Using Descriptive Statistics

The research questions are analyzed using frequency distribution and mean analysis as shown in table 2 below.

Table 2: Analysis of Responses to Digital Currencies Scale

S/N	Digital Currencies (eNaira, Bitcoin, and Ethereum)	5	4	3	2	1		
		SA	A	N	D	SD	Mean	Remark
1	The use of digital currencies like eNaira, Bitcoin, and Ethereum is increasing in Nigeria.	16	34	9	16	8	3.41	Accept
2	Digital currencies such as eNaira, Bitcoin, and Ethereum are widely accepted for transactions in Nigeria.	23	23	15	11	11	3.43	Accept
3	The value of digital currencies (eNaira, Bitcoin, Ethereum) is stable enough for everyday transactions.	17	30	14	16	6	3.43	Accept
4	Digital currencies are secure for making financial transactions in Nigeria.	21	30	9	10	13	3.43	Accept

Source: Field Survey; 2024

Table 2 presents an analysis of the research question related to the use and perception of digital currencies (eNaira, Bitcoin, and Ethereum) in Nigeria, with respondents providing their opinions on various statements using a 5-point Likert scale. The first item in the table examines whether the use of digital currencies is increasing in Nigeria. The mean score of 3.41, with a majority of respondents agreeing (SA = 16, A = 34), suggests that there is a general consensus that the use of digital currencies is indeed on the rise, leading to an "Accept" remark.

The second item assesses the acceptance of digital currencies for transactions in Nigeria. With a mean score of 3.43, supported by a balanced number of respondents strongly agreeing (SA = 23) and agreeing (A = 23), the data indicates that digital currencies are fairly widely accepted for transactions within the country, which is reflected in the "Accept" remark. The third item addresses the perceived stability of digital currencies for everyday transactions. The mean score of 3.43, again with a significant portion of respondents agreeing (A = 30) or strongly agreeing (SA = 17), indicates that while there is some agreement on the stability of digital currencies, there are also reservations, as reflected in the diversity of responses.

However, the overall remark is "Accept," suggesting a general, though cautious, acceptance of their stability. Finally, the fourth item evaluates the security of digital currencies for financial transactions in Nigeria. With a mean score of 3.43 and a majority of respondents either strongly agreeing (SA = 21) or agreeing (A = 30), there is a positive perception of the security of digital currencies. Despite some disagreement, the consensus leans towards accepting the security of these currencies for transactions, as indicated by the "Accept" remark.

Table 3: Analysis of Responses to Efficiency in Financial Transactions Scale

S/N	**Efficiency in Financial Transactions**	**SA**	**A**	**N**	**D**	**SD**	**Mean**	**Remark**
5	The use of digital currencies (eNaira, Bitcoin, Ethereum) reduces the time taken to complete financial transactions.	17	30	10	17	9	3.35	Accept
6	The adoption of digital currencies (eNaira, Bitcoin, Ethereum) minimizes errors in financial transactions.	41	10	13	5	14	3.71	Accept
7	Digital currencies (eNaira, Bitcoin, Ethereum) improve the speed of cross-border financial transactions.	14	35	16	12	6	3.47	Accept
8	The use of digital currencies (eNaira, Bitcoin, Ethereum) lowers transaction costs in financial dealings.	15	27	13	19	9	3.24	Accept

Source: Field Survey; 2024

Table 3 provides an analysis of respondents' perceptions regarding the efficiency of digital currencies (eNaira, Bitcoin, and Ethereum) in financial transactions. The first item in the table examines whether the use of digital currencies reduces the time taken to complete financial transactions. With a mean score of 3.35, a considerable number of respondents agree with this statement (SA = 17, A = 30), though there is also a significant portion that is neutral or disagrees. Despite the mixed responses, the general sentiment leans towards acceptance, as indicated by the "Accept" remark.

The second item evaluates whether the adoption of digital currencies minimizes errors in financial transactions. This statement received a higher level of agreement, with a mean score of 3.71, supported by a strong majority of respondents who either strongly agree (SA = 41) or agree (A = 10). This high level of agreement suggests

that respondents generally perceive digital currencies as effective in reducing errors, leading to the remark of "Accept."

The third item in the table considers the impact of digital currencies on the speed of cross-border financial transactions. With a mean score of 3.47, the majority of respondents agree (A = 35) or strongly agree (SA = 14) that digital currencies improve transaction speed across borders. Although there are some neutral and dissenting views, the prevailing opinion is positive, and the statement is marked as "Accept."

Finally, the fourth item assesses whether digital currencies help lower transaction costs in financial dealings. The mean score of 3.24, with a fair number of respondents in agreement (SA = 15, A = 27), indicates a general acceptance of this benefit. However, the presence of notable disagreement (D = 19) and neutral responses suggests that opinions are somewhat divided on this issue. Nonetheless, the overall sentiment remains in favor of digital currencies lowering transaction costs, as reflected in the "Accept" remark.

Test of Hypothesis

The hypotheses in the study were tested using Pearson Correlational Analysis, as shown below in the subsequent sections.

$H0_1$: The use of digital currencies (eNaira, Bitcoin and Ethereum) does not significantly enhance efficiency in financial transactions carried out in Nigeria.

		Efficiency in financial transactions
Digital currencies	Pearson Correlation	.342**
	Sig. (2-tailed)	.002
	N	83

Source: Output from SPSS Version 25 (2024)

The hypothesis ($H0_1$) posits that the use of digital currencies (eNaira, Bitcoin, and Ethereum) does not significantly enhance efficiency in financial transactions carried out in Nigeria. According to Table 4, the Pearson Correlation coefficient for the relationship between digital currencies and efficiency in financial transactions is 0.342, with a p-value of 0.002. This positive correlation coefficient indicates a moderate positive relationship between digital currencies and efficiency in financial transactions. The p-value, which is less than the significance level of 0.05, confirms that this relationship is statistically significant. Therefore, the alternate hypothesis was accepted that the use of digital currencies does significantly enhance the efficiency of financial transactions in Nigeria.

Discussion of Findings

The findings from first hypothesis testing indicate that the use of digital currencies significantly enhances the efficiency of financial transactions in Nigeria, with a Pearson correlation coefficient of 0.342 and a p-value of 0.002. This result aligns with the study by Oludare, Olanrewaju, and Ekundayo (2024), which highlights that digital currencies, particularly eNaira, contribute to improved financial processes. Their analysis suggests that the introduction of eNaira in Nigeria has had a notable impact on transaction efficiency, supporting the finding that digital currencies can streamline financial operations. Conversely, the study by Fepetu and Adewumi (2024) found that while perceived convenience positively relates to digital currency usage, financial knowledge

had an insignificant relationship, which may suggest that other factors, such as digital infrastructure or user experience, play a more critical role in transaction efficiency.

Conclusion and Recommendations

The role of digital currencies in financial transactions has been a significant area of research, particularly in understanding how they impact efficiency, transparency, and accessibility. This analysis explores the effectiveness of digital currencies such as eNaira, Bitcoin, and Ethereum in enhancing these critical aspects of financial transactions in Nigeria. The findings, as presented in the tests of hypotheses, offer hints into the positive contributions of digital currencies. The finding regarding efficiency shows that the use of digital currencies significantly enhances the efficiency of financial transactions in Nigeria. The enhanced efficiency can be attributed to the digital nature of these currencies, which streamlines transaction processes by reducing processing times and eliminating intermediaries. Digital currencies enable quicker transactions compared to traditional banking systems, which often involve multiple steps and delays. The use of blockchain technology and decentralized networks inherent in digital currencies can facilitate faster verification and settlement of transactions, thus improving overall efficiency.

On this note, the study recommended that financial institutions in Nigeria should integrate digital currencies, such as eNaira, Bitcoin, and Ethereum, into their systems to enhance the efficiency of financial transactions which will help streamline transaction processes, reduce processing times, and improve overall service delivery.

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