IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Bridging The Digital Divide - The Role Of Mobile Money Adoption In Advancing Financial Inclusion

Samala Vamshi, Mr. G Vinesh Kumar, Mr. Ravichandra BS

MBA 2nd Year, Department of Management Studies, Vardhaman College of Engineering
Assistant Professor, Department of Management Studies, Vardhaman College of Engineering

Abstract: The rise of mobile money has become a significant catalyst for financial inclusion, particularly in economies where access to conventional banking services is restricted. This investigation explores the elements such as user confidence, quality infrastructure, security transactions, and perceived ubiquity that affect the adoption of mobile money and its effects on financial inclusion. The study adopted a quantitative research approach using a survey-based method to collect data. The target respondents are mobile money users, and banking consumers in Hyderabad. A convenient Sampling is used to ensure diverse representation. The study employs a regression analysis method to assess how user confidence, quality infrastructure, security transactions, and perceived ubiquity influence the adoption of mobile money. The results indicate that each of these factors significantly enhances adoption, with perceived ubiquity exerting the most substantial influence. Moreover, the findings indicate that the adoption of mobile money plays a crucial role in improving financial inclusion, granting unbanked and underbanked communities' access to vital financial services.

Index Terms - User Confidence, Quality Infrastructure, Security Transaction, Perceived Ubiquity, Adoption of Mobile Money, Financial Inclusion

I. INTRODUCTION

Financial Inclusion

Many policymakers have embraced financial inclusion as the key to economic empowerment and a solution to rising poverty levels, which is good because there is growing evidence that it benefits the excluded population, especially women and poor adults. Unasked question: do worldwide financial inclusion practices have similar practices? If no, why are practices different? If so, what recent developments promote international financial inclusion convergence? The former addresses the issues or controversies surrounding the financial inclusion agenda, while the later addresses global financial inclusion advances that support convergence. No comprehensive literature study addresses these questions yet (Ozili, 2021). The significance of financial inclusion in economic and financial discussions has garnered considerable interest from both scholars and practitioners. Although financial inclusion has gained prominence in financial literature, a universally agreed definition remains absent (Tita & Aziakpono, 2017). The absence of a universally acknowledged definition stems from the complex character of financial inclusion and the diverse methods across various countries. The word financial inclusion encompasses the responsible and sustainable distribution of transactions, payments, savings, loans, and insurance. Financial inclusion refers to the process of integrating marginalized and vulnerable individuals into the formal financial system, ensuring their access to timely and sufficient credit and other financial goods at reasonable prices. Financial inclusion refers to a condition in which a substantial proportion of the population has access to a wide array of financial services (Olaniyi & Adeoye, 2016). Financial inclusion efforts are typically multifaceted and primarily aim to rectify systemic and institutional deficiencies while simultaneously encouraging individuals to Surmount obstacles at an individual level (Kempson et al., 2004). The advancement of financial inclusion across many nations is facilitated by charters or codes of practice established by financial institutions, mandates from central banks, and national vision

statements supported by governmental law. Financial inclusion projects are being supported by governments and international organizations, including the World Bank, International Monetary Fund, G20, and African Development Bank, among others (Frost and Sullivan Report, 2009).

Tuesta et al. (2015) examined the determinants of financial inclusion in Argentina. The study utilized three elements of financial inclusion: supply-side variables, individual characteristics, and factors influencing perception. Key elements influencing financial inclusion from an individual standpoint include a person's educational attainment, income level, and age. Income and age were the determinants influencing the perception of various barriers to involuntary exclusion. Abdu et al. (2015) examined the determinants of financial inclusion and associated gender disparity in Nigeria utilizing The Global Findex 2011 dataset. The research employed the Binary Probit Model and Fairlie decomposition technique. The research determined that financial inclusion in Nigeria was influenced by youthfulness, higher education, and elevated income levels. The study additionally discovered that advanced age, female gender, and poor income diminish the probabilities of households achieving financial inclusion. The decomposition results validate the presence of a gender disparity in financial inclusion, favoring male households. Chithra and Selvam (2013) conducted a study on inter-state disparities in access to finance, employing a composite Financial Inclusion Index. The research established that financial inclusion was influenced by socio-economic characteristics, income, literacy, population, and the penetration of deposits and loans. Akudugu (2013) examined the factors influencing financial inclusion in Ghana. The study determined that merely 40% of adults in Ghana participated in official financial institutions. The research identified that financial inclusion was influenced by individuals' age, literacy rates, socioeconomic status, proximity to financial institutions, absence of paperwork, distrust towards official financial entities, monetary deprivation, and social networks as evidenced by familial relationships.

Mobile Money

Mobile money is not mobile banking—it is a distinct product. It is most often provided by telecommunications companies, henceforth telcos (exceptions are B-Cash in Bangladesh and Splash in Sierra Leone. Mobile money systems, therefore, lie outside the formal banking system and have often been referred to as shadow banking systems (for a definition of a shadow banking system (Bernanke,2012). Agents always have an existing business and provide mobile money services as an addition to their regular business. The requirements to become an agent vary across countries. In Kenya, for example, potential agents need to apply to Safaricom, the operator of the country's main mobile money service, to become an agent (Jack et al.,2010). Although specific terminology may differ internationally, e-money (also referred to as 'mobile money') is generally characterized as a stored value instrument that (i) is issued upon receipt of funds; (ii) comprises electronically recorded value stored on a device (such as a server, card, or mobile phone); (iii) may be accepted as a payment method by entities other than the issuer; and (iv) is redeemable for cash. The principle of convertibility differentiates electronic money from credit cards (Greenacre & Buckley, 2014).

Jack & Suri, (2014) research examined the influence of diminished transaction costs on risk sharing by assessing the effects of a mobile money innovation on consumption patterns. In the panel sample, the adoption of the innovation rose from 43 percent to 70 percent. Research indicates that shocks diminish consumption by 7 percent for nonusers, whereas the consumption of user households remains unchanged. The mechanisms driving these consumption benefits are augmented remittances received and the variety of senders. The study presented robustness checks that corroborate these findings and utilized the four-fold expansion of the mobile money agent network as a source of exogenous variation in access to the innovation. Aron (2015) offers a comprehensive analysis of the regulatory aspects of mobile money systems, emphasizing the necessity to unbundle regulation at the component level and to construct regulations tailored to each component, including customer registration, e-money exchange and storage, foreign transfers, and interoperability. This section addresses the primary innovations in the regulatory framework resulting from the emergence of mobile money.

Research Question

How does User Confidence affect the Mobile Money Adoption?
How does the adoption of mobile money change depending on quality infrastructure?
How might Security Transaction influence Mobile Money Adoption?
How important is perceived ubiquity to the Adoption of Mobile Money?
How might the Adoption of Mobile Money support Financial Inclusion?

Objective of the Study

To analyze the influence of User Confidence on the Adoption of Mobile Money
To examine the influence of Quality Infrastructure on the Adoption of Mobile Money
To Investigate the influence of Security Transaction on the Adoption of Mobile Money
To evaluate the relationship between Mobile Money Adoption and Financial Inclusion.

Review of Literature and Hypothesis

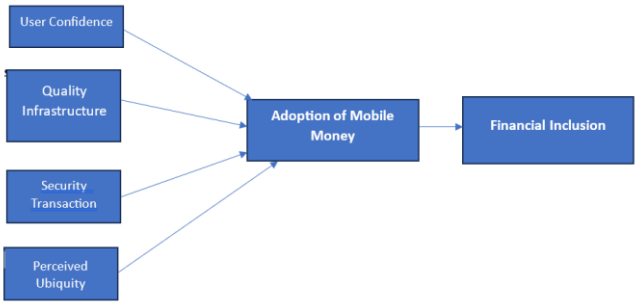

Figure -1 Conceptual Model

User Confidence

User confidence in mobile banking services is enhanced by trust, service quality, and perceived value. Improvements in service features and the resolution of user issues, particularly for senior clients, are crucial for bolstering confidence in mobile money transactions (Ekatan et al., 2022). User confidence in mobile money is affected by perceived dependability and functionality. The research emphasizes that confidence, customer service, and security are essential for banking applications, but user-friendliness and functionalities augment the attractiveness of third-party payment applications (Pahari et al., 2023). User confidence in mobile money is profoundly impacted by trust, which is shaped by perceived simplicity of use, perceived usefulness, structural assurance, and ubiquity. Establishing trust mitigates uncertainties and hazards, hence enhancing user acceptance and utilization of mobile payment services (Yan & Yang 2014, October). User confidence in mobile money is greatly affected by perceived security elements, including robust authentication and authorization protocols. Trust is essential in influencing consumers' intentions to use mobile payment systems, especially in uncertain transactional contexts (Eze et al., 2008).

H1: User confidence significantly enhances the adoption of mobile money.

Quality Infrastructure

A robust institutional framework facilitates mobile money services, enhancing financial inclusion. The study asserts that robust institutional quality facilitates mobile money adoption, which is essential for attaining greater financial inclusion, particularly in developing economies characterized by fragile institutional frameworks (Bawuah, 2024). Mobile money functions as a robust infrastructure for financial services, enabling the transfer of cash and electronic value between customers, enterprises, and suppliers. It expands geographic reach, lowers payment expenses, and fosters innovation in the retail finance sector of emerging nations (Kendall et al.,2011). Mobile Money Systems can enhance local infrastructure by augmenting labor demand and promoting local innovation, thus facilitating economic development. This enhancement in infrastructure facilitates the effective distribution of resources and risk management within communities, hence fostering overall local development (Ramada-Sarasola, 2012). Robust infrastructure, especially in internet and mobile services, markedly improves the digital finance sector. The study demonstrates that robust digital infrastructure enhances mobile money utilization, therefore fostering economic growth and elevating per capita income (Tariq et al., 2023).

H2: Quality infrastructure positively impacts the adoption of mobile money.

Security Transaction

Mobile payments necessitate strong security authentication to reduce risks associated with electronic transactions. The study presents an anonymous authentication mechanism that employs transaction keys and asymmetric algorithms to bolster transaction security, safeguard user information, and mitigate identity theft (Nanang et al., 2024, October). The security of mobile money transactions is compromised by cybercrime,

requiring stringent user authentication measures. Multifactor authentication methods, such as QR codes, improve security by 46%, guaranteeing authentic user verification and reducing the danger of fraudulent transactions with sophisticated technologies and algorithms (Khan et al., 2023). Payment transaction security involves technology such as cryptographic protocols and tokenization to safeguard mobile money transfers. The advancement of security protocols is influenced by rules and standards, tackling issues presented by mobile wallets and contactless payments to maintain consumer confidence (Kim et al., 2010). Cybercrime poses a significant threat to mobile money transaction security, requiring stringent user authentication measures. Multifactor authentication methods bolster security by verifying user authenticity, reducing fraud risks, and employing sophisticated technology to safeguard financial transactions from unwanted access and potential vulnerabilities (Khan et al., 2023).

H3: Security transactions substantially enhance the use of mobile money.

Perceived Ubiquity

The perceived ubiquity of mobile money arises from the widespread access to mobile phones, with over 75% of the population having access. This accessibility facilitates financial transactions for the unbanked, especially in regions devoid of conventional financial institutions and infrastructure (Maurer, 2013). The perceived ubiquity of mobile money denotes the extensive availability and accessibility of services, which is essential for success. An extensive network of merchants, agents, and partners promotes user acceptance, facilitating financial inclusion in emerging nations (Caballero, 2012). Perceived ubiquity, a utilitarian attribute, profoundly affects the overall perceived value of mobile banking services, shaping users' intentions to continue utilizing these services. Highlighting ubiquity can improve user engagement and satisfaction in mobile money environments, especially in underdeveloped nations (Prodanova et al., 2019). Perceived ubiquity in mobile money denotes the extensive availability and accessibility of mobile money transfer services, facilitating effortless transactions for users. This view propels customer adoption, as services provided by wireless carriers frequently compete on technical convenience and reduced costSs (Merritt, 2011).

H4: Perceived Ubiquity augments the Adoption of Mobile Money.

Mobile Money and Financial Inclusion

Mobile money services promote financial inclusion by offering accessible, cost-effective, and secure financial solutions to unbanked communities in developing economies. They facilitate users in depositing, withdrawing, transferring funds, and settling bills, hence diminishing dependence on conventional banking institutions (Awuah, 2025). Mobile banking services, especially mobile account management, enhance financial inclusion in Ghana. Nonetheless, mobile banking transfers adversely affect it, although mobile payments exhibit no substantial correlation. The research underscores the necessity for creative strategies to improve access to financial services (Saeed & Donkoh, 2024). Mobile money markedly improves financial inclusion by granting unbanked individuals access to safe financial services. It enables efficient transactions, diminishes dependence on cash, and empowers underprivileged populations, thereby incorporating them into the formal economy and fostering economic progress in emerging markets (Alao & Alonge, 2024). Mobile money markedly improves financial inclusion, especially for women in Kogi State, Nigeria. It diminishes transaction costs, enhances cash flow management, and stimulates economic activity, consequently favorably influencing women's financial stability and engagement in the economy (Idris et al., 2024).

H5: The adoption of mobile money substantially enhances financial inclusion.

Research Gap

Research on mobile banking and payment services has shown that trust, service quality, perceived value, security, and user-friendliness are crucial factors in enhancing user confidence. However, there is a lack of research on the interplay between these factors, particularly for diverse user demographics. Emerging technologies like biometric authentication and AI-driven customer support are also underexplored. Comparative studies on the effectiveness of traditional banking applications versus third-party payment platforms are scarce. The role of robust institutional frameworks, infrastructure, and mobile money services in promoting financial inclusion and economic development is also underexplored. The impact of mobile money systems on local innovation, labor demand, and risk management is also underexplored. The effectiveness of security measures and the integration of emerging technologies like blockchain and biometrics is also underexplored. The long-term socio-economic effects of mobile money adoption, including poverty reduction and gender equality, are also underexplored. Future research should focus on optimizing mobile money services to achieve inclusive economic growth.

Research Methodology

Research Design

The study will adopt a quantitative research approach using a survey-based method to collect data.

Data Collection

Primary Data: A structured questionnaire using a 5-point Likert Scale (1 = Strongly Disagree, 5 = Strongly Agree) will be distributed to respondents.

Target Respondents: Mobile money users, and banking consumers in Hyderabad.

Sampling Technique: Convenient Sampling is used to ensure diverse representation.

Data Analysis

Regression Analysis to test the hypotheses and determine significant predictors of mobile money adoption.

Results and Discussion

Table-1

Reliability Analysis

Variables	Numbers of Items	Cronbach Alpha
User Confidence	4	0.929
Quality Infrastructure	4	0.915
Security Transaction	4	0.933
Perceived Ubiquity	4	0.953
Adoption of Mobile Money	4	0.953
Financial Inclusion	4	0.935

The high alpha value of 0.929 indicates that user confidence is very reliable, demonstrating remarkable consistency in respondents' opinions of their confidence in utilizing mobile money services. The alpha value of 0.915 for Quality Infrastructure signifies that the quality of infrastructure is extremely trustworthy, indicating that respondents consistently view the infrastructure supporting mobile money services as sturdy and dependable. The high alpha value of 0.933 for Security Transaction indicates that transaction security is very trustworthy, suggesting that users continuously see mobile money transactions as secure. The alpha value for perceived ubiquity (0.953) is the highest among all variables, indicating that perceived ubiquity is highly dependable. This indicates a robust agreement among participants regarding the extensive availability and accessibility of mobile money services. The adoption of Mobile Money (0.953), similar to perceived ubiquity, exhibits a notably high alpha value, indicating that the metrics for measuring mobile money adoption are highly trustworthy and consistent. The high alpha value of 0.935 for financial inclusion indicates that it is highly trustworthy, signifying that respondents regularly view mobile money as a means to enhance financial inclusion.

Table -2

Hypothesis Testing using Regression Analysis

Hypothesis	Variables	Beta Coefficient	R2	P-Value
H1	User Confidence & Adoption of Mobile Money	0.822	0.676	.000
H2	Quality Infrastructure & Adoption of Mobile Money	0.801	0.641	.000
H3	Security Transaction & Adoption of Mobile Money	0.802	0.643	.000
H4	Perceived Ubiquity & Adoption of Mobile Money	0.867	0.752	.000
H5	Adoption of Mobile Money & Financial Inclusion	0.835	0.697	.000

User Confidence (H1): The beta coefficient of 0.822 and the R^2 value of 0.676 indicate a robust and positive relationship between user confidence and the adoption of mobile money. This suggests that an increase in user confidence correlates strongly with a heightened likelihood of adopting mobile money.

Quality Infrastructure (H2): The beta coefficient of 0.801 and the R^2 value of 0.641 indicate that infrastructure quality is a significant factor influencing mobile money adoption. A robust digital and financial infrastructure fosters user confidence and promotes the adoption of mobile money services.

Security Transactions (H3): The beta coefficient of 0.802 and R^2 of 0.643 indicate that security in transactions strongly influences mobile money adoption. This underscores the need of stringent security protocols in fostering consumer confidence and participation in mobile money services.

Perceived Ubiquity (H4): This variable possesses the greatest beta value (0.867) and R^2 (0.752), signifying that the perceived ubiquity of mobile money services significantly impact adoption. This indicates that enhancing the accessibility of mobile money across various platforms and locales can facilitate increased adoption rates.

Adoption of Mobile Money and Financial Inclusion (H5): The implementation of mobile money markedly improves financial inclusion, evidenced by the beta coefficient (0.835) and R^2 value (0.697). This substantiates the notion that mobile money services facilitate financial inclusion for unbanked communities by offering accessible financial options.

Discussion

User confidence in mobile money is affected by perceived dependability and functionality. The research emphasizes that confidence, customer service, and security are essential for banking applications, but user-friendliness and functionalities augment the attractiveness of third-party payment applications (Pahari et al., 2023). The result reveals that The significant positive correlation between user confidence and the adoption of mobile money underscores the critical role of trust in digital financial services. Individuals who view mobile money platforms as trustworthy and effective are more inclined to utilize them for their transactions. Service providers should prioritize enhancing user experience, tackling issues associated with fraud, and guaranteeing smooth customer support to foster and maintain trust. Mobile money functions as a robust infrastructure for financial services, enabling the transfer of cash and electronic value between customers, enterprises, and suppliers. It expands geographic reach, lowers payment expenses, and fosters innovation in the retail finance sector of emerging nations (Kendall et al.,2011). The study found that the importance of quality infrastructure in the adoption of mobile money cannot be overstated. An advanced telecommunications and banking infrastructure guarantees accessibility, reliability, and smooth transaction processing, thereby promoting adoption. Countries lacking sufficient digital payment infrastructure may face challenges in adoption rates, highlighting the necessity for ongoing investments in mobile networks, financial technology, and secure payment gateways.

The security of mobile money transactions is compromised by cybercrime, requiring stringent user authentication measures. Multifactor authentication methods, such as QR codes, improve security by 46%, guaranteeing authentic user verification and reducing the danger of fraudulent transactions with sophisticated technologies and algorithms (Khan et al., 2023). Payment transaction security involves technology such as cryptographic protocols and tokenization to safeguard mobile money transfers. The advancement of security protocols is influenced by rules and standards, tackling issues presented by mobile wallets and contactless payments to maintain consumer confidence (Kim et al., 2010). The findings indicate that security is a crucial issue in digital transactions, and the results affirm its substantial influence on the adoption of mobile money. Individuals are more inclined to participate in mobile financial transactions when they view the platform as safeguarded against fraud, cyber threats, and identity theft. Implementing strong security measures like multi-factor authentication, encryption, and fraud detection mechanisms can significantly enhance adoption.

The perceived ubiquity of mobile money arises from the widespread access to mobile phones, with over 75% of the population having access. This accessibility facilitates financial transactions for the unbanked, especially in regions devoid of conventional financial institutions and infrastructure (Maurer, 2013). The perceived ubiquity of mobile money denotes the extensive availability and accessibility of services, which is essential for

success. An extensive network of merchants, agents, and partners promotes user acceptance, facilitating financial inclusion in emerging nations (Caballero, 2012). The study reveals that among all variables, the influence of perceived ubiquity on mobile money adoption was found to be the most significant. This indicates that when individuals view mobile money services as broadly available and user-friendly through various platforms—like mobile applications, USSD, and agent banking—they are more inclined to embrace them. Service providers ought to prioritize broadening their outreach, collaborating with retail enterprises, and incorporating mobile money into diverse payment systems to improve accessibility. Mobile money services promote financial inclusion by offering accessible, cost-effective, and secure financial solutions to unbanked communities in developing economies. They facilitate users in depositing, withdrawing, transferring funds, and settling bills, hence diminishing dependence on conventional banking institutions (Awuah, 2025). The findings indicate that the adoption of mobile money plays a crucial role in enhancing financial inclusion. This finding is consistent with worldwide patterns, highlighting how mobile money services have played a crucial role in enhancing financial access for unbanked and underbanked communities. Mobile money acts as a crucial catalyst for financial empowerment by facilitating digital transactions, savings, and access to credit, all without the necessity of traditional bank accounts.

Conclusion

The study emphasizes the important elements affecting the acceptance of mobile money as well as its function in encouraging financial inclusion. The results verify that mobile money uptake is much influenced by user confidence, quality infrastructure, security transactions, and perceived ubiquity. Among these, perceived ubiquity shows the highest correlation, which emphasizes the need of accessibility and convenience in promoting adoption.

Moreover, the research shows that using mobile money greatly improves financial inclusion, therefore confirming its ability to close the financial disparity for underbanked and unbanked groups. Greater economic involvement and digital financial empowerment depend on mobile money services' incorporation into daily transactions and financial systems as they develop.

Service providers, legislators, financial institutions, and mobile money providers must cooperate to realize the advantages of mobile money by increasing user confidence, improving digital infrastructure, applying strong security measures, and so extending service accessibility. Through addressing these elements, mobile money can become a transforming tool helping to increase financial inclusion and build a more inclusive digital economy.

Scope for future Research

Future studies can investigate other elements including digital literacy, socioeconomic issues, and governmental legislation that might affect mobile money acceptance. Deeper insights into user behavior and adoption trends could come from a comparison analysis of many areas or demographic groups, therefore helping to contribute to a more complete knowledge of how mobile money influences financial systems all around. Research may investigate the interplay between mobile money and other financial services, including microfinance, insurance, and investment platforms. Analysing the synergy between mobile money and conventional banking systems could facilitate the development of more inclusive financial ecosystems. Subsequent studies might assess the influence of emerging technologies such as blockchain, artificial intelligence (AI), and biometrics on the security, efficiency, and user experience of mobile money. Evaluating how these technologies bolster transaction security and user confidence could yield significant insights for fintech enterprises. Longitudinal studies could be undertaken to monitor shifts in consumer behavior and mobile money utilization over time. Comprehending how external factors, such as economic fluctuations, global crises (e.g., pandemics), or changes in consumer preferences, affect adoption can provide a dynamic perspective on the industry.

Reference

- Abdu, M., Buba, A., Adamu, I., & Muhammad, T. (2015). Drivers of financial inclusion and gender gap in Nigeria. The Empirical Econometrics and Quantitative Economics Letters (EEQEL), 4(4), 186-199.
- Akudugu, M. A. (2013). The determinants of financial inclusion in Western Africa: Insights from Ghana. Research Journal of Finance and Accounting, 4(8), 1-10.
- Alao, O., & Alonge, E. (2024). Advancing financial inclusion through digital payment platforms in emerging markets. Finance. Account. Res. J, 6, 2028-2060.
- Awuah, E. (2025). The Digital Wallet Revolution: Assessing Mobile Money's Role in Transforming Emerging Economies: A Review. Asian Journal of Economics, Business and Accounting, 25(1), 35-40.
- Bawuah, I. (2024). Mobile money and financial inclusion: The role of institutional quality. Global Social Welfare, 1-15.
- Bernanke, B. S. (2012). Some reflections on the crisis and the policy response. Rethinking the financial crisis, 3-13.
- Caballero, L. L. A. C. P. (2012). Strategic analysis of mobile money ventures in Developing countries (Doctoral dissertation, Massachusetts Institute of Technology).
- Chithra, N., & Selvam, M. (2013). Determinants of financial inclusion: An empirical study on the inter-state variations in India (Vol. 2296096). SSRN.
- Ekadany, I. R., Widiyanti, M., Shihab, M. S., & Adam, M. (2022). Influence of Trust, Quality of Service and Value Perception of User Confidence on Mobile Banking Services (Case Study on BNI Palembang Branch Customers). Cakrawala Repositori IMWI, 5(2), 431-438.
- Eze, U. C., Gan, G. G. G., Ademu, J., & Tella, S. A. (2008). Modelling user trust and mobile payment adoption: a conceptual framework. Communications of the IBIMA, 3(29), 224-231.
- Frost and Sullivan, NCR. (2009). Scalable and Sustainable Financial Inclusion Strategy, in NCR White Paper on Financial Inclusion.
- Greenacre, J., & Buckley, R. P. (2014). Using trusts to protect mobile money customers. Sing. J. Legal Stud., 59.
- Idris, S. A., Ebeh, J. E., Abubakar, S., & Yelwa, M. (2024). Parametric Analysis of Mobile Money Adoption and Women Financial Inclusion in Kogi State-Nigeria. International Journal of Social Science Humanity Management Research, 3(10).
- Jack, W., & Suri, T. (2014). Risk sharing and transactions costs: Evidence from Kenya's mobile money revolution. American Economic Review, 104(1), 183-223.
- Jack, W., Suri, T., & Townsend, R. M. (2010). Monetary theory and electronic money: Reflections on the Kenyan experience. FRB Richmond Economic Quarterly, 96(1), 83-122.
- Kendall, J., Maurer, B., Machoka, P., & Veniard, C. (2011). An emerging platform: From money transfer system to mobile money ecosystem. Innovations: Technology, Governance, Globalization, 6(4), 49-64.
- Kempson, E., Atkinson, A., & Pilley, O. (2004). Policy level response to financial exclusion in developed economies: lessons for developing countries. Report of Personal Finance Research Centre, University of Bristol.
- Khan, H. U., Sohail, M., Nazir, S., Hussain, T., Shah, B., & Ali, F. (2023). Role of authentication factors in Fin-tech mobile transaction security. Journal of Big Data, 10(1), 138.
- Kim, C., Tao, W., Shin, N., & Kim, K. S. (2010). An empirical study of customers' perceptions of security and trust in e-payment systems. Electronic Commerce Research and Applications, 9(1), 84-95.
- Maurer, B. (2013). Afterword: Mobile money, money magic, purse limits and pins: tracing monetary pragmatics. In Beyond Liquidity (pp. 115-125). Routledge.
- Merritt, C. (2011). Mobile money transfer services: the next phase in the evolution of person-to-person payments. Journal of Payments Strategy & Systems, 5(2), 143-160.
- Nanang, H., Hayadi, B. H., Sukmana, H. T., Durahman, Y., Arifin, V., & Azhari, M. (2024, October). How Important is Security Authentication in the Mobile Payment System. In 2024 12th International Conference on Cyber and IT Service Management (CITSM) (pp. 1-5). IEEE.
- Olaniyi, E., & Adeoye, B. (2016). Determinants of financial inclusion in Africa: A dynamic panel data approach. University of Mauritius Research Journal, 22, 310-336.
- Ozili, P. K. (2021, October). Financial inclusion research around the world: A review. In Forum for Social Economics, 50(4), 457-479.

- Pahari, S., Manna, A., & Biswas, D. (2023). Pay with confidence: A thematic analysis of user intentions and perceptions on third-party and banking payment apps. Indian Journal of Finance, 17(5), 25-38.
- Prodanova, J., Ciunova-Shuleska, A., & Palamidovska-Sterjadovska, N. (2019).
- Ramada-Sarasola, M. (2012). Can mobile money systems have a measurable impact on local development?. Available at SSRN 2061526.
- Saeed, M. M., & Donkoh, E. (2024). Mobile banking services and financial inclusion among customers of commercial banks: Evidence from an emerging economy. Business Strategy & Development, 7(4), e70035.
- Tariq, S. S., Iftikhar, S. F., Iftikhar, K., Raza, H., & Idrees, S. (2023). The Role of Digital Finance in Economic Development: A Cross-Country Analysis. Journal of Policy Research, 9(3), 160-171.
- Tita, A. F., & Aziakpono, M. J. (2017). The effect of financial inclusion on welfare in sub-Saharan Africa: Evidence from disaggregated data. Economic Research Southern Africa, Working Paper, 679.
- Tuesta, D., Sorensen, G., Haring, A., & Camara, N. (2015). Financial inclusion and its determinants: the case of Argentina. Madrid: BBVA Research.
- Yan, H., & Yang, Z. (2014, October). An empirical examination of user adoption of mobile payment. In 2014 International Conference on Management of e-Commerce and e-Government (pp. 156-162). IEEE.