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Blockchain Technology as a Digital Banking Tool: Enhancing Financial Inclusion and Customer Satisfaction Among Commercial Bank Customers in Lagos, Nigeria

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The problem of financial inclusion has not been resolved in Nigeria as many citizens continue to be deprived of basic banking services. Blockchain technology solves these issues by adding more security, decentralization, and efficiency to financial transactions. Previous studies have investigated the effects of blockchain on financial systems, but studies on how blockchain can aid the enhancement of customer satisfaction and inclusion in Nigeria's banking sector is scarce. Therefore, this study investigates the relationship between blockchain adoption, financial inclusion, and customer satisfaction among bank customers in Lagos, Nigeria.

A sample of 266 respondents was used to distribute a structured online questionnaire based on a simple random sampling technique. The data was analyzed using descriptive statistics, Chisquare tests, regression analysis and reliability tests. Education Level has a significant effect on owning of bank account ($\chi^2 = 20.32$, p < 0.001), while employment status is significantly related to blockchain adoption ($\chi^2 = 30.25$, p < 0.001). Nevertheless, blockchain awareness was not markedly linked with gender (p = 0.211). Additionally, the security (p = 0.002) and decentralization (p < 0.001) factors explain 44.1% of variation in customer satisfaction ($R^2 = 0.441$, p < 0.001), while speed and transparency are not meaningful. Based on a Cronbach's Alpha of 0.93 to assess the scale for blockchain importance, it confirmed a reliability of the scale used.

To the best of the author's knowledge, this study makes the first attempt to provide empirical evidence about how the blockchain features matter to the customer satisfaction in in Nigeria's financial sector. The findings indicate that security and decentralization should be the priority factors for the financial institutions to implement blockchain solutions to improve users' satisfaction and inclusion. The opportunity to adopt blockchain in rural and underserved populations could lead to more inclusive digital banking solutions for the future research.