WHAT CAN WE LEARN FROM THE ADOPTION OF BANK TECHNOLOGY-ENABLED INNOVATIONS FROM THE PERSPECTIVE OF THE CUSTOMERS IN SOUTHWESTERN NIGERIA?

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Abstract
The study investigated the characteristics of adopters of ICT-enabled services in selected banks and explores the factors influencing customers' adoption of these innovative channels. The motivation for integrating these innovative services in Nigerian commercial banks stems from the policy intervention by the apex bank to transition into a seamless cashless economy and to address transactional challenges. A survey research design was employed to examine customers' experiences and preferences related to these digital services. Results revealed that among the respondents, 53.2% operated savings accounts, 19% had current accounts, and 5.8% held domiciliary accounts. Most respondents were graduates, with self-employed individuals being the largest professional category. Factor analysis identified four significant factors ("Usability," "Utility," "Channel Quality," and "Performance") as the key factors impacting customers' ease of use of technology, while "Support Services" had no significant influence. These factors explained 56.94% of the variance, emphasising their importance in shaping customers' satisfaction with technology-enabled banking services. Policy recommendations focused on strengthening support services, emphasising usability, promoting utility, ensuring channel quality and performance, fostering digital literacy, and encouraging collaboration and innovation to optimise digital banking experiences and promote financial inclusion.
Keywords: Technology, Usability, Utility, Adoption, Digital Services

Introduction

Computers and the Internet along with their consequent spread in different forms, have exerted a pervasive impact on all aspects of society, sectors, and the way of life of the people. Scholars have presented evidences in literature on the efficacy of Internet adoption and applications in education (Awoleye, Siyanbola & Oladipo, 2008; Adeleke & Jegede, 2020), in the banking sector (Alzoubi, Alshurideh, Kurdi, Alhyasat & Ghazal, 2022) and as a tool for automation and digitalisation in the industry (Attaran, 2021). Attaran (2021) and Ranta, Aarikka-Stenroos & Väisänen (2021) have both emphasised the role of technologies in fostering innovations and their influence on the development of other technologies and value enhancements across various platforms. Notably, technologies have been instrumental in driving business models towards circular economies, facilitating smooth resource flow and

creating added value.

Furthermore, Ho, Wu, Lee, and Pharm (2020) highlighted the impact of competition on banks and financial institutions, compelling them to introduce novel electronic banking products. These products have significantly influenced the customer experience by offering 24-hour service, irrespective of their geographical locations. Additionally, these electronic banking products have led to improved cost-cutting measures, enhanced transaction efficiency, and increased overall productivity for the banks. In the business sector, particularly in the banking industry, the influence of adopting and extensively utilising these technologies has been extensively studied and documented in the literature (Sharma, Singh, and Sharma, 2020; Giovanis, Assimakopoulos, and Sarmaniotis, 2019). Giovanis et al. (2019) further emphasised the impact of technologies on mobile self-service and its connection to the adoption of ICT-driven service delivery channels in the banking sector. As a result, banks have achieved a significant competitive edge by utilising ICT-driven products, enabling them to employ direct marketing and deliver exceptional customer care. This has proved instrumental in expanding their customer base, as noted by Pooya, Khorasani, and Ghouzhdi (2020).

Maokomba & Musiega (2014) identifies five variables as the potential factors that influence the use of ICT enabled products by the customers. These are: reduction in cost of transaction, revenue generation and convenience, subscription rate and speed of delivery. ICT-driven Service delivery channels influence the cost, convenience, speed and then revenue contribution. Emmanuel (2011) in his research noted that different factors affect the adoption of ICT-driven service delivery channels in the banking sector. The research tested the diffusion of innovation theory in Nigeria using principal factor analysis and multiple regression analysis, with samples from 401 bank customers. The findings showed that the complexity, compatibility and trialability were significant determinants of customers' positive disposition towards the use of ICT-driven Channels which has significant effects on intention to use it. Jannat and Ahmed (2015) revealed that major factors that influenced the adoption and usage of the available ICT-driven channels by customers are: convenience, system availability, security and trust, cost effectiveness, accuracy of transaction, ease of use, responsiveness, transaction speed, effectiveness and suitability. In addition, Kahandawa and Wijayanayake (2014) found that dissatisfaction level of customers rises mostly from unending hours of waiting in the banks to either withdraw, deposit money or for other related bank services. Other challenges that have been identified include but are not limited to delay in delivering or rendition of bank statements of accounts; unstandardised accounting practices, delay in the clearance of cheques lodged in by customers; high tariff on services coupled with other irregular charges, among others.

In the service delivery system, the use of ICT-driven channels has proven to be a significant breakthrough, especially in the banking industry. Okoye, Omankhanlen, Okoh & Isibor (2018) reported that Nigerian banks have made notable strides in service delivery through the adoption of these channels. In their

study involving 120 customers from selected deposit money banks in Ogun and Lagos States, Okoye et al. (2018) identified crime reduction, risk reduction, and ease of use as key factors with substantial impacts on customer satisfaction concerning internet-based banking services. In the same vein, Eze and Egoro (2016) documented that Nigerian banks experienced a boost in profits due to the implementation of electronic banking and related digital services. These banks predominantly offered four e-banking channels, namely automatic teller machines, electronic mobile banking, internet banking transactions, and point of sales services.

The introduction of online facilities has significantly simplified Internet banking in Nigeria, allowing banks to provide their vast number of customers with the convenience of accessing their accounts from any branch or location, regardless of their account's branch of origination. The future of banking lies in ICT-driven systems and services. Notably, major services offered by banks include Automated Teller Machines, internet banking, mobile banking solutions, Point of Sale, electronic financial accounting, and reporting. While commercial banks have reaped profits from these advancements, the primary focus now shifts to ensuring customer satisfaction and the quality of service delivery.

There is no doubt that the advancement in the banking sector in Nigeria may have been propelled by the cashless policy of the government through its apex bank. The Central Bank of Nigeria as an element of the Nigerian National System of Innovation has the responsibility to regulate the activities of the commercial banks through policy instruments (Osakwe & Nwakaego (2022). In the attempt to alleviate the menace of unsatisfactory services rendered by the banking system in Nigeria and to further inject the culture of digital banking to the Nigerian society, the Central Bank of Nigeria (CBN) introduced the cashless policy (Awoleye, Okogun & Siyanbola, 2013). The need for the introduction of this policy was further substantiated by the various challenges faced by the cash economy which include but not limited to transaction errors, delayed, irregular and incorrect rendition of bank transactions, delayed cash consummation, theft among others leading to loss of lives and properties (Kahandawa *et al.* 2014). The effort to address these issues from the provider's (the Nigerian banking industry) side, necessitated the integration of ICT-driven service delivery channels as an improved alternative to traditional banking methods.

Purpose of the Study

The main objective of this study is to investigate the factors responsible for the adoption of Bank ICT-enabled products, the perspective of the customers in Southwestern Nigeria. The specific objectives therefore are to:

i. investigate the characteristics of the adopters of ICT-driven services among selected banks;
ii. examine the factors responsible for the adoption of ICT-driven service delivery channels by the customers in the study area.

Research Questions

This study sought to find answers to the following questions:

i. What are the characteristics of the adopters of the banks' ICT-enabled services in Southwestern Nigeria?

ii. What are the factors influencing the adoption of the ICT- enabled services among the bank customers in the study area?

Hypotheses

H_o1: There is no significant difference in support services influencing the ease of use of ICT-enabled channels among the bank customers in Southwestern Nigeria.

H_o2: There is no significant difference in usability of ICT-driven channels on its actual ease of use among the bank customers in the study area.

H_o3: There is no significant difference in utility influencing the use of ICT-enabled channels among bank customers in the study area.

H_o4: There is no significant difference in channel quality influencing the use of ICT-enabled channels among bank customers in the study area.

H_o5: There is no significant difference in performance influencing the use of ICT-enabled channels among bank customers in the study area.

Methodology

The study adopted a descriptive survey research design. The population of the study comprised all the customers of the 25 commercial banks in Southwestern Nigeria. There are not known documents or databases where the total number of the banked customers in the Southwestern region could be ascertained. The research thus adopted an unknown population technique which has been previously used in literature (Mulenga and Mulenga, 2014). The study selected 414 bank customers from the unknown populations of banked customers in the region. A multi-stage and purposive sampling technique was used in this study. The stages involve selection from top to bottom as follows: purposive selection of Southwestern zone among 6 geopolitical zones in Nigeria, which hosts the majority of banks headquarters in Nigeria. Purposive selection of three States in the region, Lagos state, the commercial hub of the nation. Oyo state, home for the third-largest city in Africa and also an industrial hub. Osun State has a higher concentration of higher educational institutions in the region. Purposive selection of towns, Victoria Island being an economic centre of Lagos State and host to headquarters of Banks. Ikeja the capital City of Lagos State. Ibadan and Ogbomoso, being the largest city in Oyo state, the state capital and industrial hub of the state. Osogbo and Ife is an economic hub, the state capital and has a concentration of government offices and establishments. Three bank branches were purposively selected in the selected towns in the study area. Sixty-nine (69) customers were randomly selected in each of the towns selected for the study. Table 1. Provides the distribution of the questionnaire and the return rate. Cronbach's alpha was used to determine the reliability of the instruments. This assessed the internal consistency of the data. The instrument consists of an 18-item 5-

point Likert-type scale, which rates the item's level of agreement from high (5) to low (1). Cronbach's alpha result showed the data reached a satisfactory average reliability of $\alpha = 0.81$, which indicates a good internal consistency and reliability.

Table 1: Percentage Distribution of Respondents State

Locations	Questionnaire Distributed	Returned	Return Rate (%)
Lagos	138	127	92.0
Oyo	138	96	70.0
Osun	138	72	52.2
Total	414	295	71.3

Source: Author's field survey

Data collected was analysed using frequency regression analysis.

Results

Characteristics of the respondents

In this section, the Social demographic characteristics of the participants are discussed: types of bank account, gender, the number of years the account holder has been operating the account, highest qualification, profession, and category of respondents.

On types of account holding, Table 2 shows that from two hundred and ninety-five (295) responses received, one hundred and fifty-seven (157) respondents were operating savings accounts, which represents 53.2% of the total respondents. The result thus shows that savings account holders were the highest number of respondents. This may be largely due to the fact that the requirements for opening a savings account is simple and usually at the disposal of intending customers of the banks. It may also be due to the low-cost of maintaining a savings account, which may be somewhat more affordable. Bank charges on savings accounts are also minimal compared to other types of accounts. Concerning holders of current accounts, fifty-six (19%) respondents were holders of current accounts. It was observed that current account holders were more than those operating domiciliary accounts which stood at 5.8%. The reason for this lower proportion may be as a result of the requirement for opening a domiciliary account which is stricter than current account among the banks in Nigeria. Some of the respondents stated some of the reasons for opening a current account over other types of accounts. Some of these among others are salary requirements, the ease of using cheque books as a means of payment and some other business purposes. Domiciliary account which stood at 5.8%, has the strictest opening requirement.

One major requirement for opening a domiciliary account is an international passport which is not usually owned by common people in Nigeria. Putting the total number of account holders operating both current and saving accounts together, this totalling about 72.2%. The importance of account holding cannot be

overemphasised, as it is a known and acceptable proxy for financial inclusion in the financial sector ecosystem (Asongu, Biekpe & Cassimon, 2021; Kuznyetsova, Boiarko, Khutorna & Zhezherun, 2022). In addition, other authors have reiterated that remittances may increase the demand for savings instruments, while considering the fact that households are more likely to use these instruments as a safe haven for their extra cash (Saydaliyev & Oskenbayev, 2020; Kuznyetsova et al., 2022).

Table 2: Social-Demographic Characteristics of the Respondents

Parameters	Variables	Frequency	Percentage (%)
Types of Accounts	Saving	157	53.2
	Current	56	19.0
	Domiciliary	17	5.8
	Both saving & current	65	22.0
	Total	**295**	**100.0**
Gender (N=294)	Male	174	59.2
	Female	120	40.8
	Total	**294**	**100.0**
Number of years N=294	1 - 5	66	22.4
	6 - 10	117	39.8
	11 - 15	76	25.8
	16 - 2-	29	9.9
	21 - 25	4	1.4
	26 - 30	2	0.7
	Total	**294**	**100.0**
Qualification (N=295)	Primary	7	2.4
	O'Level	23	7.8
	OND/NCE	69	23.4
	HND	72	24.4
	Bachelor	94	31.9
	Masters	23	7.8
	PhD	7	2.4
	Others	0	0.0
	Total	**295**	**100.0**
Profession	Public servant	63	21.4
	Private employee	86	29.2
	Self employed	92	31.2
	Student	51	17.3
	Others	3	1.0
	Total	**295**	**100.0**

Parameters	Variables	Frequency	Percentage (%)
Category of Student Respondents	Undergraduate	39	76.5
	Postgraduate	12	23.5
	Total	**51**	**100.0**

Source: Author's field survey, 2019

In Table 2, the result indicates that the respondents have huge experience being bank account holders. As it is obvious that a good proportion of the respondents were noted to own and have operated their accounts between the category of 6-10 years. The further impressive report shows that about a quarter (25%) of the total respondents have between 11-15 yrs experience, operating bank accounts. It is also not surprising to note that very few of the respondents (9.9%) have been operating their accounts for 16–20 years. Putting these all together, despite the change in the banking system that necessitated the aggressive use of digital services, the customers were able to adapt successfully across the milestones. In the study of Endalew (2019), saving's capacity of households was reported to be largely influenced by account holding experience.

Table 2 shows the gender spread of the respondents as male to female ratio was observed to be 6:4. This result shows that the spread of the coverage is a bit skewed towards the male respondents, hence this result should not be interpreted as to think that there exists any gender dichotomy in the use of the available ICT-enabled innovations in the products deployed by the banks. It only typifies the coverage and the availability of the respondent in this study. Future research with the intent to examine how gender mediates the ease of use of technologies in the banking sector could ensure equal stratification of the instrument among the gender.

Human capital is the accumulation of knowledge, skills and experiences and this has been codified as education in this study (Kuznyetsova et al., 2022). Table 2 thus shows that the highest distribution of respondents was Bachelor's degree which accounted for 31.9% of the respondents. Also, those with Higher National diploma stood at 24.4% and holders of Ordinary National Diploma or Nigerian Certificate in Education (OND/NCE) were Seventy-nine respondents (23.4%). Thus, the finding indicates that the majority of the account holders assessed in this study are graduates. This may not be unconnected with the fact that people with higher education do not find it difficult to adapt to new changes as may be occasioned by new technologies. This is supported by Kuznyetsova et al. (2022) in their research on understanding consumers' FinTech adoption, which reported that education moderates the effect of performance expectancy on usage intention. This is equally corroborated by Aggarwal et al. (2023) on a similar ground.

Regarding professions of respondents as presented in Table 2, the majority were noted to be self-employed (31.18%). This was followed by private employees which accounted for 29.15% of the respondents. Although a good number of the public servants (21.4%) were represented as well as 17.3% of students. Of these

students, 76.5% of them were undergraduate while the remaining 23.5% were postgraduate students. This distribution indicates that for all facets of human endeavours, whether employed, business owners, students amongst others, banking has become part of life. It also indicates that application of ICT-enabled service delivery channels is applicable and usable by as many as are desirous and ready to use.

Factors Influencing the ICT-Enabled Service Delivery Channels

Table 3 shows the summary of the redistribution of the 18-item subjects for factor analysis, which were principally extracted with consideration of factors with eigenvalues greater than one. These latent variables were renamed based on the items that constituted it. For example, the support services component has adequate infrastructural support, prompt and adequate complaint resolutions, availability of ICT-driven guiding regulations and adequate awareness about new ICT-driven channels (see Table 3). This factor suggests that the presence of proper support services contributes significantly to the usability of ICT-enabled channels.

Table 3: Factors affecting the usability of ICT-driven Channels using factor analysis with principal components analysis method

Rotated Factors Matrix(a)					
	Components				
	1	2	3	4	5
Support services					
Availability of adequate infrastructural support	0.692				
Prompt and adequate complaint resolutions	0.756				
Availability of ICT-driven guiding regulations	0.700				
Adequate awareness about new ICT-driven channels	0.682				
Usability					
Adequate instruction for its use		0.757			
Ease of use of the technologies		0.807			
Effectiveness of the channels		0.785			
Utility					
Cost effectiveness			0.708		
Time saving on business			0.816		
Provision of instant settlement of fund-related transactions			0.802		

Rotated Factors Matrix(a)					
	Components				
	1	2	3	4	5
Channel Quality					
Channel's reliability				0.55	
Secure Channels				0.594	
Suitability of the technology to business				0.614	
Easy accessibility (i.e., proximity to customers)				0.477	
Availability of various ICT channels (e.g., POS, ATM, Mobile banking etc.)				0.59	
Performance					
Channels response time (Fast speed					0.686
Accuracy of the technology (i.e., free of errors)					0.648
Total					
	24.569%	**11.695%**	**8.354%**	**6.556%**	**5.769%**

The component alone accounts for 24.57% of the total variance in the ease of use of technology. This factor underscores the critical role of support services in shaping customers' experiences with the digital innovative services provided by the banks. It emphasises the significance of a reliable infrastructure, responsive customer support, clear guidelines, and effective communication to ensure the usability and satisfaction of customers with the bank's digital channels. To substantiate the importance of support services in the context of literature, Sheth et al. (2023) in their study on growing importance of customer-centric support services for improving customer experience noted that it is imperative for businesses to adopt customer support services as a business strategy as this goes a long way in the overall customer experience throughout the value chain of any product. Almaiah et al. (2022) also reported that “support services” is a catalyst to using digital services such as internet banking. Li et al. (2021) in their own view, says that it facilitates access to banking services.

The second component which is renamed as usability was observed to have a total variance of 11.695%, this seems to be the second best, after the support services. This factor implies that providing clear instructions and ensuring ease of use and effectiveness are crucial for improving usability. It emphasises the importance of clear instructions, user-friendly interfaces, and effective functionality to ensure customers can easily and efficiently utilise these services. By prioritising usability,

banks can create a positive and seamless user experience that encourages customer engagement and adoption of their innovative digital services. Parera and Susanti (2021) found an association between usability and customer loyalty as it relates to using mobile banking. It further expatiates that usability is an indispensable feature of quality applications and customer's satisfaction. The reception of frontline service robots in retail banking in a study was also reportedly influenced by its usability. (Amelia et al., 2022).

On utility as one of the extracted components, Table 3 explains 8.35% of the total variance in the data and highlights the importance of cost-effectiveness, time-saving functionalities, and instant transaction settlements in shaping customers' perceptions and satisfaction with innovative ICT-enabled services provided by banks. It then means that users prefer channels that help a lot in saving cost (cost effectiveness). Technology has significantly contributed to improving customer satisfaction in the banking industry by providing convenience, accessibility, enhanced customer service, security, innovative services, and seamless integration (Modi et al., 2023; Amelia et al., 2022). As technology continues to evolve, banks will likely find more opportunities to enhance customer satisfaction and deliver even more value to their clients.

The other two components extracted are: channel quality and performance which explains 6.56% and 5.77% respectively of the total variance in the data. Channel quality for example, emphasises the critical role of channel quality in shaping customers' experiences with the innovative ICT-enabled services offered by the banks. Meeting customers' expectations for reliability, security, tailored services, easy accessibility, and diverse channel options ensures a positive customer experience and strengthens the overall perception of the bank's innovative ICT-enabled services. As shown in Table 3, one of the items for this component is security and confidentiality. This has been reported as among the most important reasons for adopting and using ICT-enabled channels by users in a previous study (Sánchez-Mangas *et al.* 2011). It was therefore agreed that security is also a significant influencing factor that affects the use of the technologies by banks' customers. Users prefer a medium of relating with their banks without any fear of security breaches. Finally, channel performance was also identified as a key component in ensuring continued loyalty of the customers to keep the attitude of using the digital channels for their services. As this plays a vital role in shaping customer experiences with digital banking services. Quick response times and accurate technology are essential elements that contribute to a positive perception of the bank's digital channels. By consistently meeting and exceeding customer expectations in terms of performance, banks can cultivate satisfied and loyal customers in the rapidly evolving digital banking landscape.

A confirmatory assessment of the factors influencing the use of bank innovative digital services.

The result as shown in Table 4 shows that four out of the five variables are

positively related to ease of use of technology. The corresponding statistic also suggests that the model is robust as Nagelkerke is above 0.7 threshold (Sewak, 2022; Shapiro et al., 2022) which indicates that the five factors account for the variability in the data that influences the ease of use of technology, which stood at 72.4%.

In Table 4, support services (-0.596) were noted to have a negative relationship with the ease of use of technology. This is also supported by its odds ratio (0.55) which is less than 1. Thus, we accept the null hypothesis (**H_o1**) for support services at 95% confidence interval. This shows that "support services" (as a factor) is not statistically significant, thus it is accepted as a non-significant factor in this context. This thus means that the respondents did not show confidence in the way support services were deployed for their use of the available technologies for the banking operations. Further to this, the banks may not have done enough in the area of customer service for complaint resolutions, awareness creation on their products and adequate infrastructural support which are the elements of support services.

On the ground of usability, the regression coefficient for "Usability" stood at 3.14, and the p-value is 0.000. The odds ratio is 23.15. The p-value being less than 0.05 indicates that the variable "Usability" is statistically significant in explaining the variation in the "ease of use of technology" among customers. The odds ratio 23.15 for Usability means, one unit increase in Usability of the bank ICT-enabled product, will increase the ease of use by 23.15 times. This is indicative of the fact that usability has a stronger relationship to ease of use of technology than any of its counterparts. Thus, we reject the null hypothesis (H_o2), as an insignificant factor that positively influences customer experience with digital services.

Table 4: Regression Analysis of the Latent Factors

Factors	Estimate	SE	Wald	P	Odds Ratio	Decision (95%)
• Support services	-0.596	0.339	3.087	0.079	0.55	Accept
• Usability	3.142	0.557	31.859	0.000	23.15	Reject
• Utility	0.639	0.271	5.564	0.018	1.89	Reject
• Channel quality	0.836	0.266	9.906	0.002	2.31	Reject
• Performance	0.878	0.244	12.928	0.000	2.41	Reject
Nagelkerke	0.724					
-2 Log Likelihood	69.04					
Chi-Square	127.76					

Dependent variable: ease of use of technology

From Table 4, further results were extracted for other factors, which are: Utility, Channel Quality, and Performance: The regression coefficients for "Utility," "Channel quality," and "Performance" are 0.639, 0.836, and 0.878, respectively. Their respective p-values are 0.018, 0.002, and 0.000, with odds ratios of 1.89, 2.31,

and 2.41. Similar to "Usability," these three factors are statistically significant in explaining the variation in the "ease of use of technology" among customers. Hence, the hypotheses H_o3, H_o4 and H_o5 are rejected as insignificant factors that positively influence customers' banking experience with digital services in Southwestern Nigeria. The overall model thus shows that Nagelkerke's R-squared value is 0.724, indicating that approximately 72.4% of the variation in the "ease of use of technology" can be explained by the latent factors considered in this regression analysis. One can then conclude that the findings suggest that "Usability," "Utility," "Channel quality," and "Performance" significantly impact customers' experience with digital services in banks, positively influencing the "ease of use of technology." In contrast, "Support services" is not a significant factor in this context. This information is thus provided to guide banks and policymakers in prioritising and enhancing key factors to improve customers' overall satisfaction with digital banking services.

Conclusion

This study aimed to explore the characteristics of adopters of ICT-driven services in selected banks and investigate the factors influencing customers' adoption of these innovative channels. The motivation for integrating ICT-driven services in Nigerian commercial banks came from the policy intervention by the apex bank to transition into a cashless economy, aiming to address transactional challenges and enhance security. A survey research design was employed to examine customers' experiences and preferences related to these digital services. Among the respondents, 53.2% operated savings accounts, 19% had current accounts, and 5.8% held domiciliary accounts. Most respondents were graduates, and self-employed individuals constituted the largest professional category. The findings highlight that customers from diverse backgrounds readily embrace ICT-enabled banking innovations, incorporating banking into their daily lives. Factor analysis identified four significant factors ("Usability," "Utility," "Channel Quality," and "Performance") impacting customers' ease of use of technology, while "Support Services" did not significantly influence customers' experiences. Collectively, these factors explained 56.943% of the variance, emphasising their importance in shaping customers' satisfaction with ICT-driven banking services.

Recommendations

Strengthening support services should be a priority. Policymakers should encourage financial institutions to invest in robust support systems, ensuring the availability of adequate infrastructural support, efficient complaint resolution mechanisms, and clear ICT-driven guiding regulations. By prioritising customer support and responsiveness, banks can provide users with the necessary guidance to effectively utilise digital services, resulting in increased satisfaction and trust. In addition, emphasis should be placed on usability in the design and deployment of digital banking services. Advocating customer-centric design principles, financial

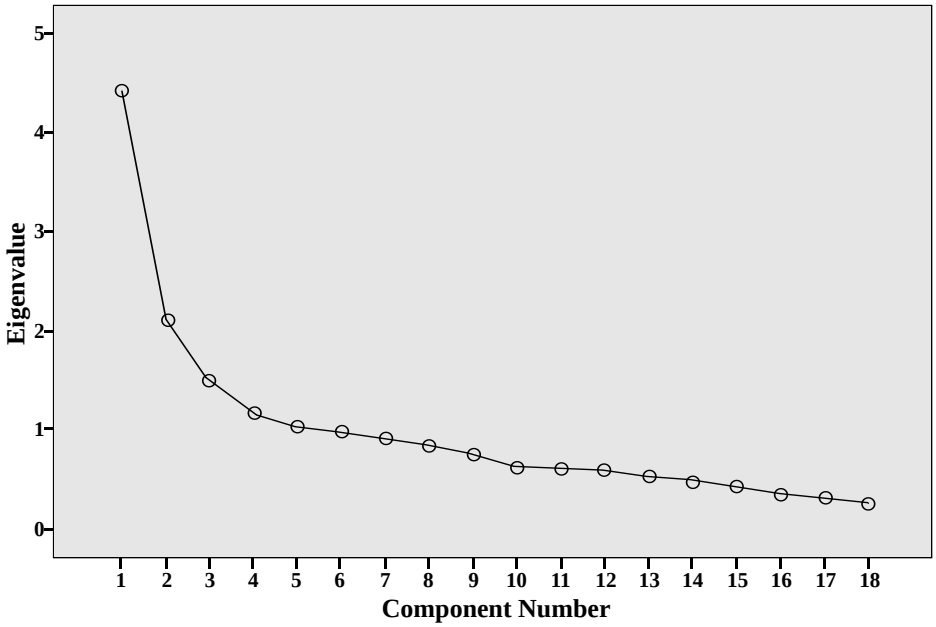
institutions can ensure that their services are user-friendly, intuitive, and easy to navigate. Regular user testing and feedback loops can help identify areas for improvement, making the digital channels more engaging and accessible to customers. Another essential focus is utility; policymakers should encourage banks to offer cost-effective solutions that deliver tangible value to customers. This can be achieved through transparent fee structures, competitive pricing, and promoting services that save time and money for users. Collaborations between banks and fintech companies can also result in the development of innovative solutions tailored to different customer segments, ensuring relevance and utility. Furthermore, optimising channel performance is crucial; policymakers can encourage financial institutions to prioritise minimising response times and ensuring the accuracy and reliability of their technology delivery.

Appendix I: Extracted Factors with corresponding Variance

Components	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.422	24.569	24.569	4.422	24.569	24.569	2.515	13.972	13.972
2	2.105	11.695	36.264	2.105	11.695	36.264	2.196	12.202	26.174
3	1.504	8.354	44.618	1.504	8.354	44.618	2.153	11.962	38.136
4	1.180	6.556	51.175	1.180	6.556	51.175	2.038	11.323	49.458
5	1.038	5.769	56.943	1.038	5.769	56.943	1.347	7.485	56.943
6	.990	5.498	62.441						
7	.925	5.138	67.579						
8	.842	4.680	72.258						
9	.755	4.197	76.455						
10	.624	3.466	79.921						
11	.610	3.391	83.312						
12	.600	3.331	86.644						
13	.535	2.972	89.616						
14	.483	2.681	92.297						
15	.435	2.415	94.712						
16	.354	1.967	96.679						
17	.334	1.856	98.534						
18	.264	1.466	100.000						

Extraction Method: Principal Component Analysis.

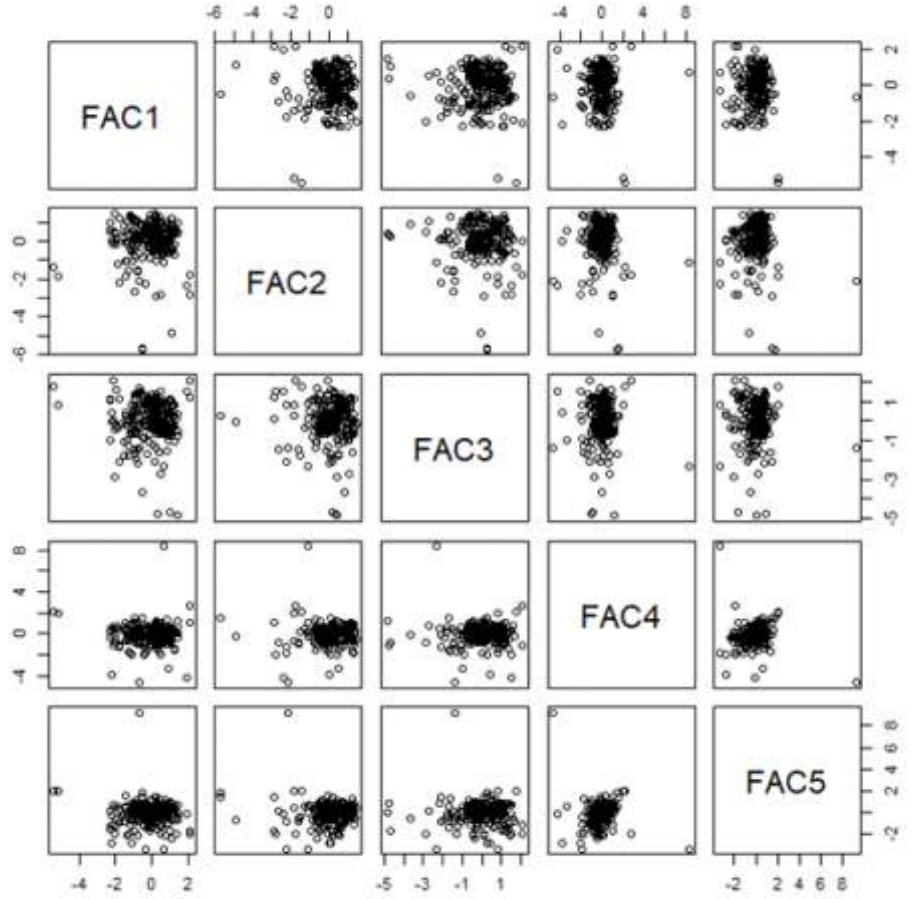
Appendix II: Scree Plot of the Extracted Factors



Appendix III: 18-Item Components employe

Labels	Components	Labels	Components
1.	Adequate instruction for its use	10.	Availability of various ICT-driven channels (e.g., POS, ATM, Mobile banking etc.)
2.	Ease of use of the technologies	11.	Availability of adequate infrastructural support
3.	Effectiveness of the channels for it functions	12.	Prompt and adequate Complaint resolutions
4.	Accuracy of the technology (i.e., free of errors)	13.	Adequate awareness about new ICT-driven channel
5.	Channel's reliability	14.	Availability of ICT-driven guiding regulations
6.	Secure Channels	15.	User's protection Policies
7.	Suitability of the technology to business	16.	Cost effectiveness
8.	Channels response time (Fast speed)	17.	Time Saving on business
9.	Easy accessibility (i.e. proximity to customers)	18.	Provision of instant settlement of fund-related transactions

Appendix IV: Pictorial Representation of the Relationships among the Latent Factors Extracted



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