## **International Journal of Finance, Economics and Business**

Vol. 3, No. 2, June 2024, pp.93-106 © 2024 SRN Intellectual Resources

Original Article

# Agency Banking Adoption Trends among Bank Customers in Tanzania: A Continued Perspective

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**Citations:** Macha, J.J., Lyimo, G.D., & Omary, F.A. (2024). Agency Banking Adoption Trends among Bank Customers in Tanzania: A Continued Perspective. *International Journal of Finance, Economics and Business*, 3(2), 93-106.

Received: 9 February 2024 Revised: 5 May 2024 Accepted: 28 May 2024 Published: 30 June 2024

Abstract: Agency banking has become crucial for expanding financial inclusion by offering banking services to underserved urban and rural areas. This study examines the behavioral factors affecting customers' continued intention to adopt agency banking using the Expectation-Confirmation Model (ECM). Data was gathered through closed-ended questionnaires distributed via Google Forms and drop-off/pick-up methods, resulting in 166 responses analyzed with Partial Least Squares Structural Equation Modeling (PLS-SEM) using SMARTPLS 4.0 software. Findings indicate that customers' satisfaction, subjective norms, perceived usefulness, and perceived convenience significantly and positively impact the continued intention to adopt agency banking. However, perceived cost and perceived trust were not significant. Additionally, perceived usefulness and confirmation significantly and positively impact customer satisfaction, while confirmation significantly impacts perceived usefulness. Mediation analysis showed that satisfaction and perceived usefulness significantly mediate the relationships examined. To enhance customers' intention to continue using agency banking, policymakers should develop strategies that promote communal culture, positive behavior towards agency banking, increased services, and broader understanding of its benefits. This research offers insights for academics and practitioners on improving adoption strategies and policies to boost financial inclusion.

**Keywords:** Agency banking; Perceived convenience; Perceived trust; Perceived cost; Subjective norms; Satisfaction; Perceived usefulness; Confirmation and continued intention



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## 1. Introduction

Agency banking is an innovation in the banking sector that offers an opportunity for bank customers to access diverse banking services via third party outlets. The services obtained through agency banking are such as cash deposits, cash withdrawals, bills settlement, funds transfer, payment of government bills and customer's account balances. A few outlets could be used, including supermarkets, petrol stations, wholesale

business centers, saving and Credit Cooperative Societies (SACCOS), pharmacies and various retail outlets. Generally, post offices and retail outlets are mainly used as agents of banks to extend banking services in various parts of the world. Thus, agency banking permits financial institutions to reach out more customers without the need for traditionally owned bank premises and it minimizes the costs of setting up physical branches (Chokuda Santu et al., 2017; Kanyugi et al., 2019). The pioneers of agency banking that include Brazili and other Latin American countries have demonstrated to the world the power of alternative banking channels in enhancing financial inclusion (Alliance for Financial Inclusion, 2012). The model enables banks to have its presence in the city outskirts and rural areas where banks lack incentive or capacity to open branches. Previous studies demonstrate significant potential success for banks to increase access to financial services especially in the remote areas (Mende et al., 2015).

Likewise, in Tanzania to enhance financial inclusion the guidelines for bank agents were initially issued by the Bank of Tanzania in 2013 and the same year 591 agents were approved to provide banking services in the country (BOT, 2014). The government has taken diverse measures that support the implementation of agency banking that include issuing updated agent bank guidelines (2017) to accommodate modern banking practices and digitalization. Following the issuance of updated guidelines the number of bank agents towards the end of 2022 reached 75,238 (BOT, 2022). Despite of all initiatives to enhance outreach of banking services the agent banking is mainly dominated by large banks and mainly concentrated in major cities that include Dar es Salaam, Mwanza, Arusha, Dodoma and Mbeya that accounts 58.6% of all bank agents (BOT, 2020). This implies the usage of agent banking in the rural areas is still lower relative to urban centers.

Despite the increased outreach, banks encounter competition from other financial service providers or delivery channels such as mobile money operators' network and Fintech that compete with traditional banks. This suggests that banks must devise mechanisms to ensure retention and increased users of bank services. In addition, Tanzanian financial inclusion level in 2017 reached 67% which is lower compared to other countries such as Kenya which was 79.6% (Kanyugi et al., 2019; NFIF, 2018). The Tanzanian government has also implemented a number of reforms in the financial sector to enhance access to financial services that include first and second phase regulatory reforms in 1990s and 2000s respectively (URT, 2006). The reforms have contributed to the proliferation of several banks and various providers of financial services in the country. Thus, lower usage of financial services among the bank customers in Tanzania; particularly in the rural areas is mainly associated with individuals' readiness to use formal financial services for their daily life activities. Various studies on innovations have confirmed that the success of any innovation relies on its continuance usage rather than initial adoption (Bhattacherjee & Premkumar, 2004). Similarly, agency banking being an innovative method of delivering financial services, its success will depend on its continued usage by target customers.

Various studies have been conducted to examine factors that influence individuals' intention to adopt agency banking (Githae et al., 2018). The previous studies suggest various factors that affect individuals' intention to adopt agency banking that include agency services costs, agency service security, perceived risk and awareness (Muoria & Moronge, 2018). However, studies that investigate bank customers' post-consumption intention are scarce. In addition, this study extends expectation-confirmation model by adding perceived convenience, perceived trust, perceived cost, subjective norms, and satisfaction so as to address post-consumption tendency among the bank customers. Therefore, this study aims to investigate the factors that would influence bank customers' intention to continue using agent banking in Tanzania.

## 2. Literature Review and Hypothesis Development

## 2.1. Underlying Theory

Expectation Confirmation Theory (ECT) is widely adapted in social psychology and consumer research to study individuals' post-purchase behaviour, satisfaction and marketing of services (Oliver, 1980; Papagiannidis, 2022). The theory helps to explain ways of establishing long term relationships between business and their customers. The constructs that constitute expectation confirmation theory are perceived as usefulness, confirmation of expectation, satisfaction and individuals' continuance intention towards a particular behaviour. Satisfaction is one of the key variables of the expectation confirmation model that determines individual repurchase intention of a particular service following satisfaction with prior service. However, satisfaction is determined by confirmation of expectation because confirmation provides reference for evaluating the performance of prior service, hence increasing or reducing service satisfaction (Papagiannidis, 2022). Researchers have used the theory in different contexts that include mobile banking, information systems and mobile shopping (Bhattacherjee, 2001; Rahi et al., 2022). Thus, continued intention

among bank customers to adopt agency banking could be addressed well using Expectation Confirmation Theory. To address comprehensively the issues of the current study, expectation confirmation model was adapted by incorporating perceived convenience, perceived trust, perceived cost and subjective norms. Figure 1 presents conceptual framework for the current study based on the modified expectation confirmation model. In addition, hypotheses are developed based on the model specified relationships.

### 2.2. Confirmation

Confirmation reflects individuals' realization of the expected benefits as the result of participating in a certain behaviour (Bhattacherjee, 2001). Normally, expectation confirmation theory suggests that any individual would have an expectation prior engagement in a particular behaviour. Hence, once the expectation is met in a positive way then the individual could be satisfied otherwise dissatisfied. Based on diverse studies, confirmation influences individuals' satisfaction and perceived usefulness to engage in various behaviour such as mobile banking, online shopping and internet banking usage (Jiang & Klein, 2009). Agency banking customers would repeat accessing banking services if their expectations regarding quality and experience of using agency banking were met. Therefore, the current study hypothesizes that:

H1: Confirmation has positive impact on customers' continuance intention to adopt agency banking

H2: Confirmation has positive impact on customers' satisfaction to adopt agency banking

#### 2.3. Perceived convenience

Previous studies demonstrate perceived convenience as one of the main factors considered by individuals in adopting new behaviour (Khan et al., 2017). Studies that examined adoption of new technologies such as online banking, mobile banking, internet banking and online shopping adoption found that perceived convenience had significant influence on individuals intention to adopt such technologies (Maharani et al., 2024). Similarly, bank customers' intention to continue using agency banking, which is an innovative method for bank services delivery, would be influenced by its convenience. The common aspects embraced in agency banking convenience include accessibility in different locations especially remote areas, vast services provided to customers and time savings. Thus, given that most of the banks in Tanzania operates mainly in urban areas, the use of agency banking provide convenience to individuals living in the rural or far from the bank's locations. Therefore, this study hypothesizes that:

H3: Perceived convenience has positive impact on customers' continuance intention to adopt agency banking

#### 2.4. Perceived costs

Perceived costs refer to the extent to which bank customers believe the financial cost associated with agency banking exceeds the expected return. The cost involved in agency banking is one of the main considerations for the bank customers. Agency banking normally involves some charges such as bank charges, fees, commissions and other transaction charges. Several previous studies reveal that perceived cost affects individuals' participation in a particular behaviour (Nirmawan & Astiwardhani, 2021; Rahman & Sloan, 2017). Benazic *et al.* (2015) claims that online consumer usually requires adequate information to assess the benefits and costs before engaging in any transaction. Similarly, agent bank customers require certain important information and advisory services while engaging in various banking transactions that have cost implications for them. Therefore, bank customers believe the cost of engaging in agency banking transactions for the cost of engaging in agency banking transaction for its continuance usage. Thus, this study postulates that;

H4. Perceived cost has negative impact on customers' continuance intention to adopt agency banking

## 2.5. Trust

Trust reflects customers' beliefs that banks do not engage in transactions that would harm them while using agency banking services (Chairunnisa, 2023). Studies in diverse research disciplines such as mobile banking, Islamic banking, health insurance and information systems indicate trust is a key factor that influences individuals engagement in various behaviour and consequently repeated performance of such behaviour (Benazic & Tankovic, 2015). Trust is important as well for agency banking customers because it reduces uncertainty and increases their persistent engagement in various banking services via agency banking. Based on the nature of banking transactions, trust is one of the key factors considered by customers, hence banks upholding trust would attract and retain their customers. Based on this elaboration, the study hypothesizes that: H5: Trust has a positive impact on customers' continuance intention to adopt agency banking

#### 2.6. Perceived Usefulness

Bank customers intention to adopt Agency banking and persistent usage relies on their perception regarding the benefits generated from its use (Francois & Godspower-akpomiemie, 2024). Researches in information systems and online shopping confirm perceived usefulness has an influence on individuals continued intention to use particular technology based on its benefits (Ventre & Kolbe, 2020). Thus, because bank customers perceive agency banking to be useful in accessing assorted banking services would enhance their intention for continuance intention to use agency banking. On the contrary, if they perceive agency banking as less useful, they will opt for alternative delivery channels, hence reducing possibility of continued use intention. Moreover, studies indicate perceived usefulness affect individuals satisfaction that results in increased continued intention to participate in a particular behaviour (Hidayat-ur-rehman et al., 2021). Likewise, bank customers will perceive agency banking as useful if it improves the quality of banking services and provides a satisfactory experience that enhances repeated use of agency banking. Based on the expectation confirmation model, individuals form an opinion about its usefulness after prior usage (Fernandez-Guzman & BravoEdgardo, 2018). Progressively, perceptions of agency banking customers regarding usefulness and confirmation of their expectations would enhance their satisfaction. Therefore, the following hypotheses are proposed in this study:

- H6: Perceived usefulness has positive impact on customers' continuance intention to adopt agency banking
- H7: Perceived usefulness has positive impact on customers' satisfaction to adopt agency banking
- H12: Perceived usefulness mediates the relationship between confirmation and customers' satisfaction to adopt agency banking
- H13: Perceived usefulness mediates the relationship between confirmation and customers' continuance intention to adopt agency banking

#### 2.7. Subjective norms

Subjective norms reflect the pressure to be borne by agency banking customers from the community members in case they adopt it. Basically traits of socialism still prevail in Tanzania, despite of political and economic reforms of the 1980s (Ngowi, 2009). The subjective norm is common in communities where there is strong bond among the community members. Several studies indicate subjective norms have positive and significant influence on individuals' behavioural intention (Awn & Azam, 2020; Raut et al., 2018; Xu et al., 2022; Yusuf, 2021). In addition, other studies found negative influence of subjective norms on behavioural intention (Ma et al., 2019). Negative influence is possible for communities where individuals are highly educated or lack strong community bond, hence depend less on others for decision making. Thus, bank customers' perception towards agency banking in Tanzania can be influenced positively by significant others such as relatives, loved ones, family and other community members as the result of strong bond among community members. Therefore, the following hypothesis is proposed.

H8: Subjective norms have positive impact on the customers' continuance intention to adopt agency banking

### 2.8. Satisfaction

Satisfaction refers to the emotion-based responses demonstrated by the customer after the initial use of a particular service. It reflects a general experience by an individual following evaluation and psychological state as the result of participating in a particular behaviour (Maditinos et al., 2009; Yin & Lin, 2022; Zhao et al., 2012). Previous studies show that individual satisfaction determine continuance intention to use mobile banking, virtual platforms, financial technologies and satisfaction in higher education (Santini et al., 2017). In addition, the higher degree of perceived usefulness of agency banking among the banking customers enhances their satisfaction and consequently continuance intention to adopt agency banking. Therefore, because satisfaction results from confirmation of previous experience, likewise customers of agency banking are more likely to continue using it after finding out they meet their banking needs efficiently and provide a satisfactory experience. Hence, the following hypotheses are suggested:

- H9: Satisfaction has a positive impact on customers' continuance intention to adopt agency banking
- H10: Satisfaction mediates the relationship between perceived usefulness and customers' continued intention to adopt agency banking

H11: Satisfaction mediates the relationship between confirmation and customers continued intention to adopt agency banking

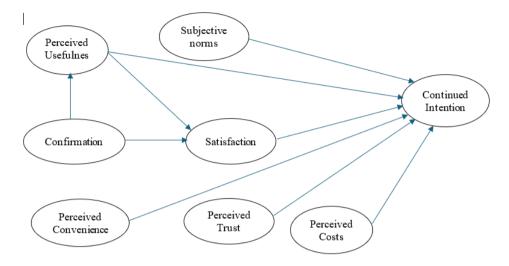


Figure 1. Conceptual Framework

## 3. Materials and Methods

### 3.1. Population and Sample

The study was conducted in Tanzania at Mkuranga district, Coastal region. The Coastal region is among the regions with low level of financial inclusion in the country and individuals have similar characteristics to other financially excluded regions (NFIF, 2018). The targeted respondents for the study were bank agent customers who were using agency banking services. Thus, non-probability sampling was suitable because the nature of financial information required could be difficult to get sampling frame. In addition, Purposive and convenience sampling techniques were employed to draw a sample of 200 respondents for this study (Samartha et al., 2022). Data was collected using online surveys via Google Forms which were distributed to bank agent customers through Whatsapp and email obtained prior data collection. Furthermore, to enhance response rate for bank agent customers who had no email or Whatsapp numbers the drop off and pick up (DOP) method was used by visiting banks and bank agent centers (Allred & Ross-Davis, 2011; Almuraqab, 2016). Subsequently, a total of 179 responses (89.5%) were obtained as the result of close follow up during data collection. However, some of the electronic questionnaires were returned incomplete and were discarded to avoid distortion of the study results, hence a total of 166 (83%) complete questionnaires were appropriate for analysis.

#### **3.2. Research Instruments**

The study used mult-item scale to measure proposed constructs which were adapted from previous studies with appropriate modifications to suit the context of the current study. Modification of the study items was carried out carefully without distorting their primary message. To measure the perception of respondents in relation to study variables a five-point Likert scale ranging from strongly agree (5) to strongly disagree was engaged. The Likert scale of 5 points was suitable for this study because it allows bank customers to express the direction and strength of their opinion regarding their continued intention to adopt agency banking (Lim et al., 2020; Ullah et al., 2022). In this study, four item scale was employed in measuring perceived convenience and perceived trust used five items scale (Sleiman et al., 2021; Susanto et al., 2016). Perceived cost and subjective norms were measured using four item scale adapted from Alsheikh & Bojei (2014) and Mbawuni & Nimako (2015). Furthermore, the study comprises six items on satisfaction, six items on perceived usefulness, five items on confirmation and five items for continuance intention (Foroughi et al., 2019; Lee, 2010; Nguyen & Ha, 2021; Susanto et al., 2016).

The survey instrument was divided into two parts which were demographic characteristics and respondents' perception on diverse items to measure study constructs. To ensure face and content validity the questionnaire was examined by experts in agent banking and professional researchers. In addition, both

98

Swahili and English questionnaires were used to draw data from respondents. Translation was imperative as most of Tanzanians are conversant with Swahili which is national language in the country. Thus, study measurement items were translated into Swahili to ensure targeted respondents could complete the questionnaire without difficulty. Given the study items were adapted from previous studies pre-test was conducted prior administering the questionnaire in the main study for improvement and ensure respondents provide accurate responses.

## 3.3. Data Analysis

The study employed partial least squares (PLS) approaches with SmartPLS 4.0 software to examine the proposed hypotheses. PLS has been used in this study due to its superiority in testing the hypothesis of predictive studies. Furthermore, PLS is appropriate in data analysis with less stringent requirements on data distribution and size of data (Hair Jr et al., 2014). It is one of the sophisticated statistical techniques that allows simultaneous analysis of the structural model (Tsai et al., 2020). To achieve the objective of the study, two steps analytical approaches were adopted in which the measurement model was assessed and finally the structural model (Anderson & Gerbing, 1988).

## 4. Results

## 4.1. Respondents' Demographic Profile

Demographic features revealed most of the respondents were aged between 18 and 64 years (87%) which implies the majority fit into the working age in Tanzania and the rest were aged 65 years and above as indicated in Table 1. On the basis of marital status, a large proportion of the data was collected from married individuals (66%) relative to single (34%). Gender distribution was unequal as more responses were obtained from males (70%) than female (30%). This reflects fewer females are engaged in economic activities that involve the use of banking services via bank agents in the country. Demographic profile demonstrated respondent to have diverse levels of education ranging from primary school to universities. The result implies most bank agent customers are financially knowledgeable.

Demography	Category	Frequency	Percentage
	18-34	88	53
Age	35-64	56	34
-	65 and above	22	13
	Male	116	70
	Female	50	30
Gender	Marital Status		
	Married	109	66
	Single	57	34
	Primary school	16	10
	Secondary school	58	35
Education Level	Certificate	15	9
	Diploma	17	10
	Graduate and above	60	36

**Table 1.** Result of Demographic Profile of Respondents

## 4.2. Measurement model

## 4.2.1. Construct Validity and Reliability Analysis

The measurement model was validated prior building the structural model to ensure reliability and validity of the relationships between measurement items and latent variables (Tsai et al., 2020). Therefore, the measurement model was examined to evaluate convergent validity by using average variance extracted (AVE), composite reliability and factor loadings. The results in table 2 indicates all items loading exceed the required threshold of 0.7, average variance extracted scores were greater than 0.5, Cronbach's alpha and composite reliability exceed 0.7 threshold as well (Fornell & Larcker, 1981). Thus, the results confirm measurement items are well correlated in measuring respective latent variables. The results confirm measures of one latent variable differ from those measuring other latent variables.

Constructs	Items	Factor Loadings	Cronbach's Alpha	Composite reliability	AVE	VIF
	CF1	0.846	-	-		
	CF2	0.883				
Confirmation	CF3	0.883	0.920	0.940	0.757	2.555
	CF4	0.880				
	CF5	0.858				
	CI1	0.891				
Continuous	CI2	0.875				
Continuance	CI3	0.902	0.914	0.937	0.749	N/A
intention	CI4	0.915				
	CI5	0.732				
D 1	PC1	0.883				
Perceived	PC2	0.894	0.842	0.905	0.760	1.655
Convenience	PC3	0.838				
	PCO1	0.722				
D 1 1	PCO2	0.738	0.021	0.0(5	0 (10	1.007
Perceived cost	PCO3	0.938	0.821	0.865	0.619	1.097
	PCO4	0.728				
	PT1	0.801				
	PT2	0.828			0.667	2.806
Perceived Trust	PT3	0.804	0.875	0.909		
	PT4	0.834				
	PT5	0.816				
	PU1	0.650				
	PU2	0.811				
Perceived	PU3	0.865	0.000	0.024		3.358
usefulness	PU4	0.867	0.900	0.924	0.672	
	PU5	0.872				
	PU6	0.833				
	SN1	0.820				
	SN2	0.721	0.050	0.004	0.702	1.839
G 1	SN3	0.916	0.858	0.904	0.703	
Subjective norms	SN4	0.883				
	ST1	0.800				
	ST2	0.883				
	ST3	0.852	0.007	0.042	0.704	4.0.40
Satisfaction	ST4	0.918	0.927	0.943	0.734	4.849
	ST5	0.865				
	ST6	0.818				

Table 2. Result of Construct Validity and Reliability

#### 4.2.2. Discriminant Validity Analysis

This study examined discriminant validity to ensure that measurement items employed for one construct are sufficiently different from those measuring other constructs. Table 3 results confirm that discriminant validity was achieved in this study as the coefficients of Heterotrait-Monotrait (HTMT) ratio were less than 0.85 (Yin & Lin, 2022). Furthermore, the scores of square root of average variance extracted (AVE) in table 4 exceeded correlation coefficients of all constructs that suggest discriminant validity is desirable (Fornell & Larcker, 1981). Thus, both square root average variance extracted and Heterotrait-Monotrait confirm measures of each construct are sufficiently different.

International Journal of Finance, Economics and Business Vol. 3, No. 2, June 2024, pp.93-106.

Constructs	CF	CI	PC	РСО	РТ	PU	SN	ST
CF	1.000							
CI	0.796	1.000						
PC	0.599	0.681	1.000					
PCO	0.139	0.145	0.204	1.000				
PT	0.809	0.745	0.63	0.068	1.000			
PU	0.859	0.852	0.639	0.083	0.791	1.000		
SN	0.58	0.698	0.527	0.086	0.676	0.609	1.000	
ST	0.864	0.845	0.608	0.151	0.868	0.899	0.731	1.000

Note: CF: Confirmation, PU: Perceived usefulness, ST: satisfaction, PC: Perceived convenience, PCO: Perceived costs, CI: Continued intention, SN: Subjective norms, PT: Perceived trust

Table 4. Res	ult of Discri	minant Vali	dity using Fo	rnell and Larc	ker
-					

Constructs	CF	CI	PC	PCO	РТ	PU	SN	ST
CF	0.87							
CI	0.733	0.865						
PC	0.525	0.597	0.872					
PCO	-0.133	-0.159	0.132	0.787				
РТ	0.726	0.67	0.541	-0.047	0.817			
PU	0.78	0.773	0.558	-0.066	0.7	0.82		
SN	0.518	0.624	0.445	-0.033	0.593	0.54	0.839	
ST	0.799	0.78	0.536	-0.146	0.78	0.824	0.655	0.857

Note: CF: Confirmation, PU: Perceived usefulness, ST: satisfaction, PC: Perceived convenience, PCO: Perceived costs, CI: Continued intention, SN: Subjective norms, PT: Perceived trust

## 4.3. Structural Model

Path analysis was conducted in this study after the confirmation of the validity and reliability of the measurement model components. SEM-PLS technique was adopted to establish the relationship between the study variables and path coefficients estimated using bootstrapping with 5,000 resamples.

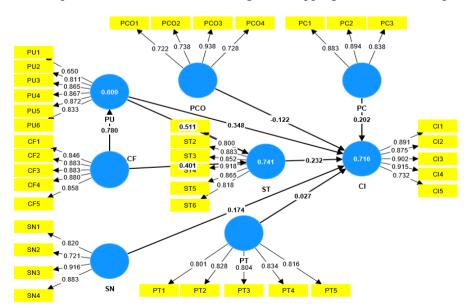


Figure 2. Results of the PLS Algorithm using SMARTPLS-4

Figure 2 indicates that the goodness of fit of the study model was measured by using R-square. R-square scores demonstrate that customers' satisfaction was 74%, 60.9% for customer's perceived usefulness and 71.6% for customers continued usage of agency banking services. The results indicate all R-square values obtained exceed 10% which confirms acceptable goodness of fit in this study (Ozili, 2023). Figure 2 presents structural model results of the current study.

## 4.4. Hypothesis Testing

#### 4.4.1. Direct Effect

To achieve the objectives of the study fourteen hypotheses were tested. The direct relationship between the study variables were tested using hypotheses H1 to H9. In addition, the study tested mediation effect among the study variables using hypotheses H10 to H14. Thus table 5 and 6 present the structural model and path analysis results. The results on table 5 reveal that confirmation ( $\beta$ =0.780, P=0.000) has significant effect on customers perceived usefulness, while perceived usefulness ( $\beta$ =0.511, P=0.000) and confirmation ( $\beta$ =0.401, P=0.000) have significant effect on customers satisfaction. Hence hypotheses H1, H2 and H7 are supported. Furthermore, the study findings indicate that perceived Convenience ( $\beta$ =0.202, P=0.000), perceived usefulness ( $\beta$ =0.348, P=0.000), subjective norms ( $\beta$ =0.174, P=0.001) and satisfaction ( $\beta$ = 0.232, P=0.017) statistically significant on customers continued intention to use agency banking. The results confirm hypotheses H3, H6, H8 and H9 are supported. However, the results indicate that Perceived cost ( $\beta$ =-0.122, P=0.052) and Perceived Trust ( $\beta$ =0.325, P=0.745) are not statistically significant to customers' continued intention to use agency banking. Therefore, based on the table 5 results, H4 and H5 are not supported.

Hypothesis	<b>Structural Path</b>	Path coefficients (β)	T value	P values	Decision
H1	CF -> PU	0.780	21.667	0.000	Supported
H2	CF -> ST	0.401	5.895	0.000	Supported
H3	PC -> CI	0.202	3.529	0.000	Supported
H4	PCO -> CI	-0.122	1.942	0.052	Not Supported
H5	PT -> CI	0.027	0.325	0.745	Not Supported
H6	PU -> CI	0.348	4.398	0.000	Supported
H7	PU -> ST	0.511	7.500	0.000	Supported
H8	SN -> CI	0.174	3.373	0.001	Supported
H9	ST -> CI	0.232	2.392	0.017	Supported

Table 5. Result of Hypotheses Testing (Direct Effect)

**Note:** CF: Confirmation, PU: Perceived usefulness, ST: satisfaction, PC: Perceived convenience, PCO: Perceived costs, CI: Continued intention, SN: Subjective norms, PT: Perceived trust

#### 4.4.2. Mediation Effect

Perceived usefulness and satisfaction are the examined mediating variables in this study. Hence, table 6 presents the results for five hypotheses tested (H10 to H14). The analysis shows that perceived usefulness and confirmation have significant indirect positive effect on customers continued intention to use agent banking through satisfaction. Hence, hypotheses H10, H11 and H12 are supported. In addition, the study findings demonstrate confirmation has significant indirect effect on customers continued intention to use agency banking and customers' satisfaction via perceived usefulness. Thus, hypotheses H13 and H14 are supported in this study.

Table 6. Resul	t of Hypotheses	Testing	(Mediation	Effect)

Hypothesis	Structural Path	Path coefficients (β)	T value	P values	Decision
H10	PU -> ST -> CI	0.119	2.385	0.017	Supported
H11	CF -> ST -> CI	0.093	2.069	0.039	Supported
H12	CF -> PU -> ST	0.399	6.661	0.000	Supported
H13	CF -> PU -> CI	0.271	4.255	0.000	Supported

Note: CF: Confirmation, PU: Perceived usefulness, ST: satisfaction, PC: Perceived convenience, PCO: Perceived costs, CI: Continued intention, SN: Subjective norms, PT: Perceived trust.

#### 4. Discussion

The study investigated behavioural factors that influence bank customers continued intention to adopt agency banking services in Tanzania. To achieve the purpose of the study structural relationships between Perceived cost, Perceived usefulness, confirmation, Subjective norms, Perceived Trust, Perceived Convenience and satisfaction on the bank customer's Continuance intention were examined. This was achieved through testing nine hypotheses (H1 to H9) as depicted on table 5. Whereby, all tested hypotheses (H1 to H9) were found to be statistically significant, except for hypotheses (H4 and H5) which were found to be statistically significant, except for hypotheses (H4 and H5) which were found to be statistically insignificant. Furthermore, the mediation impact of satisfaction and perceived usefulness were investigated as well, and all tested hypotheses (H10 to H13) were statistically significant. The statistical results for direct relationships confirm that perceived usefulness (H6) had strongest impact on customers continued intention to adopt agency banking. In addition, other variables that had strongest impact after perceived usefulness were customer's satisfaction (H9), perceived usefulness (H7) had a strong impact on customers' satisfaction and the least impact from confirmation (H2). Finally, confirmation (H1) had the strongest impact on perceived usefulness relative to all other variables to their respective dependent variables.

The study findings indicate customers perceived usefulness is the most important factor among the studied variables in this study that influence bank customers for continued intention to adopt agency banking services. In traditional banks customers receive services in the banking halls which have got some limitations in terms of time and location, thus reducing their usefulness to the customers. Therefore, with agency banking customers perceive it to be helpful in their business and daily life because they can access banking services anywhere and with less minimal time constraints (Apriani et al., 2023). The use of agency banking has increased efficiency in accessing financial services especially in the remote and rural areas where brick and mortar branches are scarce. Policy makers and practitioners should continue improving and increasing services provided through agency banking. Moreover, the findings show the perceived usefulness of having a strong impact on bank customers' satisfaction. This implies that bank customers' perception of the use of agency banking services tends to increase due to its ability to perform their task effectively and efficiently relative to other distributional channels. Likewise, confirmation was also found to have statistically significant impact on perceived usefulness. Perceived usefulness was also found to mediate the relationship between confirmations and continued intention to adopt agency banking. Similarly, perceived usefulness mediates confirmation and customers' satisfaction to adopt agency banking. On the basis of this findings, confirmation reflects agency banking customers' recognition of expected benefits of adopting agency banking (Alghizzawi et al., 2021). This in turn enhances customers' satisfaction and consequently increases continued intention to adopt agency banking.

The current study findings have confirmed bank customers' satisfaction has strong influence on their continued usage of agency banking. Furthermore, confirmation had a direct positive impact as well on the customers' satisfaction. Based on the Expectation Confirmation Model (ECM), customers' satisfaction might occur at two levels which are pre-adoption expectations and postadoption expectations (Hidayat-ur-rehman et al., 2021). Hence, higher agency banking performance leads to customers' greater confirmation and consequently more satisfaction with agency banking services. Highly satisfied agent bank customers result in a strong and reliable relationship with service providers. The findings imply that customers will have long term relationship with banks once they form positive confirmation about agency banking performance in accessing banking services, otherwise they will lower their satisfaction. Moreover, the results indicate perceived usefulness affects customers' satisfaction as well which requires policy makers to enhance the benefits of agency banking that include provision of wide range of financial services. Banks should also communicate clearly the benefits of using agency banking so as to enhance their satisfaction and consequently their continual usage.

The findings revealed that the most significant others in the community such as relatives, siblings, workmates and friends influence the perception of bank customers on the continuance usage of agency banking services. Based on this, it is possible that bank customers consider other customers' behaviour while deciding to engage in agency banking services. This implies that bankers and agency banking service providers should leverage on communal life among the Tanzanians to continue using agency banking services (Raut et al., 2018). Hence, policy makers inter alia may use sport groups in the communities, friends, relatives, religious leaders and local community leaders to convince users of agency banking for continued usage of agency banking. Moreover, Communal culture that encourages usage of agency banking services could be enhanced using celebrities, social groups and social media influencers as well that help to spread useful information regarding agency banking.

In this study, perceived convenience was found to have a direct positive impact on the customers' continued intention to use agency banking. This outcome signifies that quick access to banking services, wide range of financial services and access of banking services at different situations influences customers for continued usage of agency banking. Hence, based on market research studies perceived convenience generates place and time utility for customers of particular services (Sleiman et al., 2021; Wardana et al., 2022). Most of the banks in Tanzania are in urban areas where few banks have branches in the rural areas, thus agency banking would provide desired convenience in terms of place and time utility to bank customers. The presence of agency banking enhances access to banking services that would entice even unbanked individuals due to the high level of convenience provided via agency banking. The findings imply that policy makers should provide a more supportive environment that attracts the establishment of agencies which provide banking services in the country and as the result increases perceived convenience.

## 5. Conclusions

In short, the study extended the expectation-confirmation model to examine agency banking customers continuance intention to adopt agency banking services. Findings confirmed seven hypotheses (H1 to H3 and H6 to H9) were statistically significant and had a positive impact on the continued intention to use agency banking. However, perceived trust and perceived cost were not statistically significant (H4 and H5) that implied users of agency banking are insensitive regarding the trust and cost. Moreover, four mediation hypotheses tested were found statistically significant (H10 to H13) in enhancing perceived usefulness and satisfaction for customers to continued intention to adopt agency banking in Tanzania. The study findings are useful to policy makers in designing appropriate strategies and policies that encourage bank customers to continue using agency banking, hence increasing the degree of financial inclusion in the country. The study addresses diverse theoretical and empirical issues associated with the continued intention to use agency banking in Tanzania, however, it is imperative to recognize limitations of the study for further research. First, this study was conducted in the coastal region of Tanzania in which respondents were drawn using non-probability techniques that could limit generalization of the results to other contexts. Studies that permit generalization of research findings using probability sampling techniques are encouraged in the future. In addition, replicating the model to other regions in the country could enhance generalizability of the research model. Second, the study employed cross-sectional research design to examine continued intention of bank customers to adopt agency banking at one point of time. Further studies could employ a newly proposed model in a longitudinal context. Finally, the current study examined continued intention of agency banking users, however, to get deeper insight about agency banking users then future studies should focus on actual usage behaviour.

Author Contributions: Conceptualization, J.J.M., G.D.L, & F.A.O.; methodology, J.J.M., G.D.L, & F.A.O.; software, J.J.M., G.D.L; validation, J.J.M.; formal analysis, G.D.L, & F.A.O; investigation, J.J.M., G.D.L, & F.A.O; resources, G.D.L; data collection, J.J.M., G.D.L, & F.A.O; writing—original draft preparation, J.J.M; writing—review and editing, G.D.L, & F.A.O.; Visualization, F.A.O; supervision, J.J.M; project administration, G.D.L; funding acquisition, J.J.M., G.D.L, & F.A.O. All authors have read and agreed to the published version of the manuscript.

Funding: This research was funded by grant from the Institute of Finance Management (IFM).

Institutional Review Board Statement: Not applicable

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Not applicable.

Acknowledgments: The authors would like extend profound appreciation to the Institute of Finance and Management (IFM), Tanzania, for supporting this research and publication. We also thank the reviewers for their constructive comments and suggestions.

Conflicts of Interest: The authors declare no conflict of interest.

## References

Alghizzawi, M., Rahi, S., Mustafa, M., & Alharafsheh, M. (2021). The post-adoption behavior of internet banking users through the eyes of self-determination theory and expectation. *Journal of Enterprise Information Management*, 34(6), 1874–1892.

Alliance for Financial Inclusion. (2012). Discussion paper Agent banking in Latin America. In Discussion paper Agent.

- Allred, S. B., & Ross-Davis, A. (2011). The drop-off and pick-up method: An approach to reduce nonresponse bias in natural resource surveys. *Small-Scale Forestry*, 10(3), 305–318.
- Almuraqab, N. A. S. (2016). M-Government Adoption Factors in the United Arab Emirates : A Partial Least-Squares Approach. *International Journal of Business and Information*, 11(4), 404–431.
- Alsheikh, L., & Bojei, J. (2014). Determinants Affectig Customer's Intention to Adopt Mobile Banking in Saudi Arabia. International Arab Journal of E-Technology, 3(4), 210–219.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach. *Psychological Bulletin*, 103(3), 411–423.
- Apriani, R. G., Respati, D. K., Handarini, D., & Jakarta, U. N. (2023). The effect of perceived ease of use, perceived usefulness, and trust on intention to use of mobile banking. *Journal of Humanities, Social Sciences and Business* (JHSSB), 3(11), 94–111.
- Awn, A. M., & Azam, S. M. F. (2020). The Determinants of Investment in Islamic Sukuk: a Study of Libyan Investors. *Researchgate.Net*, 4(January), 9–19.
- Benazic, D., & Tankovic, A. C. (2015). Impact of Perceived Risk and Perceived Cost on Trust in the Online Shopping Websites and Customer Repurchase Intention Communication Skills of Tourism Employees: Self-Evaluation, Soft Skills, Self-Esteem and Entrepreneurship Intention. *Research of Economics and Business, October*, 104– 122.
- Bhattacherjee, A. (2001). Understanding information systems continuance: An expectation-confirmation model. *MIS Quarterly*, 351–370.
- Bhattacherjee, A., & Premkumar, G. (2004). Understanding Changes in Belief and Attitude toward Information Technology Usage: A Theoretical Model and Longitudinal Test. *MIS Quarterly*, 28(2), 229–254.
- BOT. (2014). Directorate of Banking Supervision Annual Report.
- BOT. (2020). Financial Sector Supervision, Annual Report 2020, 24th Edition.
- BOT. (2022). Financial sector supervision: Annual report 2022 (Issue 26 Edition).
- Chairunnisa, S. M. (2023). Analysis of Student Intentions in Using Islamic Bank Products (Issue February 2021). Atlantis Press SARL. https://doi.org/10.2991/978-2-38476-046-6
- Chokuda Santu, T. V., Mawanza, W., & Muredzi, V. (2017). An Evaluation of the Agency Banking Model Adopted by Zimbabwean Commercial Banks. *Journal of Finance and Bank Management*, 5(2). https://doi.org/10.15640/jfbm.v5n2a6
- Fernandez-Guzman, V., & BravoEdgardo. (2018). Understanding Continuance Usage of Natural Gas : A Theoretical Model and Empirical Evaluation. *Energies*, 11(8), 2019. https://doi.org/10.3390/en11082019
- Fornell, C., & Larcker, D. F. (1981). Evaluating Structural Equation Models with Unobservable Variables and Measurement Error. *Journal of Marketing Research*, 18(1), 12.
- Foroughi, B., Iranmanesh, M., & Hyun, S. S. (2019). Understanding the determinants of mobile banking continuance usage intention. *Journal of Enterprise Information Management*, 32(6), 1015–1033. https://doi.org/10.1108/JEIM-10-2018-0237
- Francois, D., & Godspower-akpomiemie, E. (2024). Investigating factors that affect the willingness to adopt peer-topeer short-term insurance in South Africa. *Digital Transformation and Society*, 3(2), 214–234. https://doi.org/10.1108/DTS-04-2023-0022
- Githae, L., Gatauwa, J., & Mwambia, F. (2018). Factors Affecting Uptake of Agency Banking Services Among Customers in Rural Kenya: A Case of Narok County. *European Scientific Journal, ESJ*, 14(16), 224. https://doi.org/10.19044/esj.2018.v14n16p224
- Hair Jr, J., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2014). A primer on partial least squares structural equation modeling (PLS-SEM). Sage Publications.
- Hidayat-ur-rehman, I., Ahmad, A., Khan, M. N., & Mokhtar, S. A. (2021). Investigating Mobile Banking Continuance Intention : A Mixed-Methods Approach. *Mobile Information Systems*, 1–17.
- Jiang, J. J., & Klein, G. (2009). Expectation-Confirmation Theory: Capitalizing on Descriptive Power. *IGI Global*, 2009, 384–401.
- Kanyugi, G. E., Gudda, P., Ombok, M., & Kibati, P. (2019). Banking Agency Adoption and its Effect on Banks Deposits of Commercial Banks in Kenya. *International Journal of Academic Research in Accounting, Finance* and Management Sciences, 9(3), 251–263. https://doi.org/10.6007/ijarafms/v9-i3/6455

- Khan, A. P., Khan, S., Ang, I., & Xiang, R. (2017). Factors Influencing Consumer Intentions to Adopt Online Banking in Malaysia. *Business & Economic Review*, 9(2), 101–134.
- Lee, M. C. (2010). Explaining and predicting users' continuance intention toward e-learning: An extension of the expectation-confirmation model. *Computers and Education*, 54(2), 506–516. https://doi.org/10.1016/j.compedu.2009.09.002
- Lim, T. S., Dzulkifli, D. Z., Osman, Z., Mohidin, R., & Jamal, A. A. A. (2020). Determinants of Perception Toward Life Insurance and Its Impact on Intention to Purchase. *Labuan Bulletin of International Business and Finance* (*LBIBF*), 18(1), 16–26.
- Ma, M., Ruhaini Muda, I., Syahirah Amin Husni Sharifah Faigah Syed Alwi Faridah Hassan Arshad Ayub Graduate Business School, N., Teknologi MARA, U., & Alam Campus, S. (2019). Determinants of behavioural intention towards green investments: the perspectives of Muslims. *International Journal of Islamic Business*, 4(1), 16– 38.
- Maditinos, D., Tsairidis, C., & Grigoriadis, C. (2009). Internet Banking user acceptance: Evidence from Greece and Bulgaria. 5 Th HSSS Conference.
- Maharani, E. S., Sekarsari, M., & Zhafiraah, N. R. (2024). The Effect of Convenience and Security on Satisfaction with Customer Interest as Mediator. *Research of Economics and Business*, 2(1), 11–24.
- Mbawuni, J., & Nimako, S. G. (2015). Predicting Clients' Intentions to Acquire Credit Facilities in Ghanaian Financial Market. *International Journal of Economics and Finance*, 7(2), 63–77.
- Mende, M. J., Bichanga, J., & Mosoti, J. (2015). Investigation on importance of agency banking in provision of banking services in Kenya: (a case of equity bank) in Kitui Central District, Kitui County, Kenya. *The International Journal of Science and Research Publications*, 5(10), pp.1-13.
- Muoria, E. ., & Moronge, M. (2018). Effect of agency banking adoption on customer retention in KCB Bank: A case study of Kiambu County, Kenya. *Journal of Management*, 5(4), 215–232.
- NFIF. (2018). National financial inclusion framework, 2018 2022: Public-Private Stakeholders Initiative.
- Ngowi, H. P. (2009). Economic Development and Change in Tanzania since Independence: The Political Leadership Factor. *African Journal of Political Science and International Relations*, 3(4), 259–267.
- Nguyen, G. Do, & Ha, M. T. (2021). The role of user adaptation and trust in understanding continuance intention towards mobile shopping: An extended expectation-confirmation model. *Cogent Business and Management*, 8(1). https://doi.org/10.1080/23311975.2021.1980248
- Nirmawan, H. M., & Astiwardhani, W. (2021). The Effect of Perceived Cost, Trust, Usefulness, And Customer Value Addition on Intention to Use of Go-Pay Mobile Payment Services In Small Traders. *Journal of Business and Management Review*, 2(10), 715–732. https://doi.org/10.47153/jbmr210.2392021
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460–469.
- Ozili, P. K. (2023). The acceptable R-square in empirical modelling for social science research. Social Research Methodology and Publishing Results: A Guide to Non-Native English Speakers, 115769, 134–143. https://doi.org/10.4018/978-1-6684-6859-3.ch009
- Papagiannidis, S. (2022). TheoryHub book. Online: Edition: Https://Open. Ncl. Ac. Uk.
- Rahi, S., Alghizzawi, M., Ishtiaq, M., Ngah, A., & Mehta, A. M. (2022). Examining consumer behaviour towards continuance use of mobile shopping apps with the integration of expectation confirmation theory and flow theory. *International Journal of Business Information Systems*, 2–24.
- Rahman, M. M., & Sloan, T. (2017). User adoption of mobile commerce in Bangladesh : Integrating perceived risk , perceived cost and personal awareness with TAM. *The International Technology Management Review*, 6(3), 103–124.
- Raut, R. K., Das, N., & Kumar, R. (2018). Extending the theory of planned behaviour: Impact of past behavioural biases on the investment decision of Indian investors. *Asian Journal of Business and Accounting*, 11(1), 265– 292. https://doi.org/10.22452/ajba.vol11no1.9
- Samartha, V., Shenoy Basthikar, S., Hawaldar, I. T., Spulbar, C., Birau, R., & Filip, R. D. (2022). A Study on the Acceptance of Mobile-Banking Applications in India—Unified Theory of Acceptance and Sustainable Use of Technology Model (UTAUT). Sustainability, 14(21), 14506. https://doi.org/10.3390/su142114506
- Santini, F. de O., Ladeira, W. J., Sampaio, C. H., & da Silva Costa, G. (2017). Student satisfaction in higher education: A meta-analytic study. *Journal of Marketing for Higher Education*, 27(1), 1–18.

- Sleiman, K. A. A., Juanli, L., Cai, X., Lei, H., & Liu, R. (2021). Antecedents of the Adoption of the New Mobile Payment System in Sudan. *Revista Argentina de Clínica Psicológica*, 30(2), 212–227. https://doi.org/10.24205/03276716.2020.4020
- Susanto, A., Chang, Y., & Ha, Y. (2016). Determinants of continuance intention to use the smartphone banking services: An extension to the expectation-confirmation model. *Industrial Management and Data Systems*, 116(3), 508–525. https://doi.org/10.1108/IMDS-05-2015-0195
- Tsai, H., Lee, Y. P., & Ruangkanjanases, A. (2020). Understanding the Effects of Antecedents on Continuance Intention to Gather Food Safety Information on Websites. *Frontiers in Psychology*, 11(December), 1–10. https://doi.org/10.3389/fpsyg.2020.579322
- Ullah, S., Kiani, U. S., Raza, B., & Mustafa, A. (2022). Consumers' Intention to Adopt m-payment/m-banking: The Role of Their Financial Skills and Digital Literacy. *Frontiers in Psychology*, 13(April), 1–12. https://doi.org/10.3389/fpsyg.2022.873708
- URT. (2006). The Banking and Financial Institutions Act, 2006.
- Ventre, I., & Kolbe, D. (2020). The Impact of Perceived Usefulness of Online Reviews, Trust and Perceived Risk on Online Purchase Intention in Emerging Markets: A Mexican Perspective. *Journal of International Consumer Marketing*, 32(4), 1–13. https://doi.org/10.1080/08961530.2020.1712293
- Wardana, A. A., Saputro, E. P., Wahyuddin, M., & Abas, I. (2022). The Effect of Convenience, Perceived Ease of Use, and Perceived Usefulness on Intention to Use E- Wallet (Empirical Study on Generation Z in Surakarta). Advances in Economics, Business and Management Research, 218, 386–395.
- Xu, Y., Du, J., Khan, M. A. S., Jin, S., Altaf, M., Anwar, F., & Sharif, I. (2022). Effects of Subjective Norms and Environmental Mechanism on Green Purchase Behavior: An Extended Model of Theory of Planned Behavior. *Frontiers in Environmental Science*, 10(February), 1–13. https://doi.org/10.3389/fenvs.2022.779629
- Yin, L., & Lin, H. (2022). Predictors of customers ' continuance intention of mobile banking from the perspective of the interactivity theory. *Economic Research-Ekonomska Istrazivanja*, 35(1), 6820–6849. https://doi.org/10.1080/1331677X.2022.2053782
- Yusuf, D. M. (2021). Effect of Attitude Mediating Subjective Norm, Perceived Behaviour Control, and Perceived Ease of Use on Online Purchase Intention Fashion Product Category. *European Journal of Business and Management Research*, 6(6), 266–270.
- Zhao, L., Lu, Y., Zhang, L., & Chau, P. Y. K. (2012). Assessing the effects of service quality and justice on customer satisfaction and the continuance intention of mobile value-added services: An empirical test of a multidimensional model. *Decision Support Systems*, 52(3), 645–656.