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CONSUMER BEHAVIOR TOWARDS THE ADOPTION OF DIGITAL BANKING CHANNELS

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Abstract
Digital banking channels have gained immense popularity and have successfully acquired and retained clients. Despite their growing popularity, some consumers still hesitate to adopt these channels. In this study, we explore the role of personality in influencing consumer behaviour towards adopting digital banking channels. The study utilised the Technology Readiness Index to gauge customers' preference for digital banking channels. To answer the research question, the researcher employed a quantitative methodology. The snowball sampling method was used, with respondents passing the questionnaire to others who met specific criteria. 338 valid responses were collected. The proposed hypotheses were tested using structural equation modelling. The study suggests that mobile banking channels can be a powerful indicator of users' preferences for various banking channels, such as internet banking, ATM, and cell phone banking. Personality traits optimism, innovativeness and insecurity were the criteria responsible for making mobile banking the most preferred digital banking channel. Financial institutions must critically examine their mobile banking platforms and provide various services to support an end-to-end customer experience. Banks must continue to promote the benefits of mobile banking, including convenient access, time-saving, and the ability to conduct basic banking tasks. Further research could examine the impact of mobile banking channels on cybersecurity and data privacy.
Keywords: consumer behavior; personality trait; technology readiness; banking channels.

INTRODUCTION

Technology advancement has significantly transformed the banking industry (Mekinjić, 2019). The most significant change has been the move towards electronic delivery channels, such as ATMs, for transactions such as withdrawals, deposits, and virtual card use (Saprikis et al., 2022; Sharanamma, 2019). While these changes aim to improve efficiency, their success ultimately depends on consumers' willingness to adopt and fully utilise these technologies (Shambare & Shambare, 2016; Ying Chieh et al., 2012). Consumers seek digital solutions offering better intuitiveness, convenience, and security features (Deloitte, 2019; Discovery Bank, 2022; Kansra et al., 2023; Nambiar & Bolar, 2023).

Despite businesses increasingly relying on technology to enhance their operations, more sophisticated technologies are being developed to provide consumers with better-quality output (Wood & Moreau, 2006). However, not all customers embrace these technologies equally due to their unique personal dispositions towards technology adoption (Godoe & Johansen, 2012; Limayem et al., 2007; Magotra et al., 2016; Ratchford & Barnhart, 2011; Remirez-Correa, 2019). To better understand customers' technology adoption tendencies in choosing their preferred digital banking channel (Internet, cell phone, Mobile banking and ATM), extensive research has been conducted (Godoe & Johansen, 2012; Lam et al., 2008; Magotra et al., 2016; Musyaffi et al., 2022; Shambare, 2013).

Numerous attempts have been made to analyse the adoption behaviour of banking customers towards digital banking channels (internet banking, mobile banking, cell phone and ATM) (Bankole et al., 2012; Brown et al., 2003; El-Aziz et al., 2014; Matlala, 2023; Shambare, 2011, 2013), and previous researchers (Ajzen, 1991; Ajzen & Fishbein, 1975; Davis, 1989; Rogers, 2003; Venkatesh et al., 2003; Venkatesh & Bala, 2008) have used various models (Technology Acceptance Model (TAM), Unified Theory of Acceptance and Use of Technology (UTAUT), Innovation Diffusion Theory (IDT), Theory of Reasoned Action (TRA), and Theory of Planned Behavior (TPB) to explore the adoption of digital banking channels among banking customers (Bankole et al., 2012; Brown et al., 2003; El-Aziz et al., 2014; Shambare, 2011). However, when studying how consumers adopt technology, personality traits often play a more significant role than demographics or psychographics (Berger, 2008).

Consequently, the study seeks to determine the extent of personality's role in steering consumer behavioural intentions towards adopting preferred digital banking channels. The study makes the following contribution: (1) Understanding and addressing these factors is crucial for banks and financial institutions to expand their digital user base and promote inclusivity. (2) Provides empirical evidence to those keen to build theories and frameworks based on the adoption of digital banking channels. According to Parumasur and Roberts-Lombard (2014), understanding personalities assist marketers to get a comprehensive representation of their customers, including but not limited to their needs, motivation, learning, attitude and perceptions.

LITERATURE REVIEW

The study of consumer behaviour investigates the choices and actions of buyers in the marketplace, including but not limited to psychological, emotional, and logical reasoning behind their decisions (Kemp et al., 2018; Šostar & Ristanović, 2023). Many scholars and researchers have attempted to define and capture the complex nature of consumer behaviour (Lemon & Verhoef, 2016; Prasad & Jha, 2014). Smirti (2016), Roy and Datta (2022), and Kotler (2000) define consumer behaviour as the process that drives consumers to decide what, when, where, and how to purchase goods and services. According to Roy and Datta (2022), consumer behaviour is all about individuals' actions to search, buy, and position products and services that they believe will meet their needs.

Technology readiness refers to people's willingness to adopt and use new technologies to achieve their goals (Gupta & Garg, 2015). The readiness of customers to adopt technology is crucial in the trial and use of new technologies, according to Meuter et al. (2005). When studying how consumers adopt technology, personality traits often play a more significant role than demographics or psychographics (Berger, 2008). This study will discuss the personality traits of optimism, innovativeness, and insecurity that lie at the heart of consumer intentions towards technology.

Optimism towards technology is a positive outlook (Kaur Sahi & Gupta, 2013), which is closely associated with customers' beliefs in control, flexibility, convenience, and efficiency (Ismail & Abdul Wahid, 2020; Magotra et al., 2019; Nasser Al-Junaibi et al., 2022; Parasuraman, 2000).

Innovativeness is defined as the tendency to be a technological pioneer, and personal innovativeness within the domain of information technology is defined as the willingness of an individual to try out any new information technology (Al Nasseri et al., 2016; Ismail & Abdul Wahid, 2020; Kaur Sahi & Gupta, 2013; Magotra et al., 2019; Parasuraman, 2000).

Insecurity is defined as the distrust and scepticism of banking customers in the performance of SSTs for meeting their banking requirements (Magotra et al., 2019; Parasuraman, 2000). Insecurity results from a lack of trust in technology and its ability to work correctly, and it is related to the expected benefits of innovation or its realisation (Ismail & Abdul Wahid, 2020; Magotra et al., 2019; Nasser Al-Junaibi et al., 2022; Parasuraman, 2000).

Multiple researchers, Aguidissou et al. (2017) and Magotra et al. (2019), argued that self-service technology has become vital to digital banking, leading numerous financial institutions to offer their customers Internet, cell phone, and mobile banking services. Chavan (2013) pointed out that these services aim to provide more convenient ways for customers to manage their bank accounts from anywhere at any time. Similarly, Awotunde et al. (2021) study mentioned that technological advancement has transformed the banking industry, giving customers greater independence, flexibility, and control over financial matters.

Consumers' preference towards internet banking

Prior researchers (Martin et al., 2018; Nel & Boshoff, 2014) studies affirm that banking customers perform a variety of financial and non-financial transactions through a bank website or mobile app, commonly known as the Internet. Internet technology in banking services has been a significant financial innovation. Several studies, including Maduku (2014), Namahoot and Laohavichien (2018), and Ramavhona and Mokwena (2016), have demonstrated the success of internet banking in the banking industry (Lin et al., 2020). Internet banking is a financial service that banking operators have developed over the years, and customers have become accustomed to the convenience it offers (Lin et al., 2020). However, with the emergence of financial technology, customers now have access to financial services from diverse channels beyond traditional institutions.

Consumers' preference towards ATM

An ATM is a secure electronic device that allows financial institution customers to access banking products and services directly without human interaction (Sridharan & Malladi, 2016; Weerasiri & Koththagoda, 2017). Consumers can withdraw cash, get cash advances using a credit or debit card or digital wallet, and check their account balances without a representative or teller (Carbó-Valverde & Rodríguez-Fernández, 2014; Sridharan & Malladi, 2016; Wang et al., 2012). ATMs have boosted bank productivity by providing a cost-effective solution (Kaur Sahi & Gupta, 2013) while reducing in-branch service-related expenses. Consequently, they have helped banks maintain their competitive edge (Nguyen et al., 2014).

Consumers' preference towards the mobile banking

Mobile banking emerged with the advent of smartphones, although text messaging had allowed limited banking services to be available for decades (Poppe et al., 2020). According to Govender and Sihlali (2014), mobile banking is an extension of Internet banking and a cost-effective solution that benefits account consumers and financial institutions (Chawla & Joshi, 2021; Govender & Sihlali, 2014). Additionally, it saves consumers time and money and provides comfort and convenience (Shahid et al., 2022).

Consumers' preference towards the Cell phone Banking

Prior researchers (Bankole et al., 2012; Shambare, 2013) defined cell phone banking as a digital system that enables users to access essential financial services daily through their mobile

devices, such as smartphones, feature phones, or tablets. One of the benefits of this service is that it allows for flexibility in terms of time, provides convenient customer response, and can ultimately help save costs. (Bankole et al., 2012; Brown et al., 2003; Shambare, 2011, 2013). Cell phone banking is enabled by technologies such as Wireless Application Protocol (WAP), SMS-based Wireless Internet Gateway (WIG), and Unstructured Supplementary Service Data (USSD).

Consumers' adoption of digital banking has been examined from different perspectives in the marketing literature. Many theories have been postulated to understand the adoption of the Internet, cellphone, ATM and mobile phone (Magotra et al., 2019; Ramavhona & Mokwena, 2016). The Theory of Planned Behaviour (TPB) supports this claim, as it has been used to predict banking consumer behaviour (Acikgoz. Elwalda, & De Oliveira, 2023). TRA aims to predict consumer intentions and behaviour by providing a model to recognise target consumers' attempts at behavioural change (Wu, 2020). Moreover, a positive attitude towards self-service technologies can increase adoption rates, as noted by Kim et al. (2023). Acikgoz et al. (2023) and Forrester et al. (2016) found a positive correlation between personality and behavioural intention.

In this context, the study seeks to establish the effect of personality traits (optimism, innovativeness and insecurity of consumers) in adopting their preferred digital banking channels as outlined in the literature. Consequently, the hypotheses are formulated as follows:

H1: Customers' personality will affect consumers' behavioural intention towards the adoption of mobile banking.
H1a. Innovativeness will positively influence the intention to adopt mobile banking.
H1b. Optimism will positively influence the intention to adopt mobile banking.
H1c. Insecurity will negatively influence the intention to adopt mobile banking.
H2: Customers' personality will affect their behavioural intention towards the adoption of internet banking.
H2a. Innovativeness will positively influence the intention to adopt internet banking.
H2b. Optimism will positively influence the intention to adopt internet banking.
H2c. Insecurity will negatively influence the intention to adopt internet banking.
H3: Customers' personality will affect their behavioural intention towards the adoption cellphone banking.
H3a. Innovativeness will positively influence the intention to adopt cellphone banking.
H3b. Optimism will positively influence the intention to adopt cellphone banking.
H3c. Insecurity will negatively influence the intention to adopt cellphone banking.
H4: Customers' personality will affect their behavioural intention towards the adoption of ATM.
H4a. Innovativeness will positively influence the intention to adopt ATM.
H4b. Optimism will positively influence the intention to adopt ATM.
H4c. Insecurity will negatively influence the intention to adopt ATM.

METHODOLOGY

The methodology used in the study that provided the statistics mentioned in the question involved a quantitative approach and a descriptive survey design. In order to gather insights into customers' personalities regarding digital banking channel adoption, a survey was conducted on four different electronic channels: internet, mobile banking, cellphone and ATM. The questionnaire evaluated various personality aspects such as optimism, innovativeness, insecurity and consumers' behavioural intention to adopt the preferred digital banking channel. The questionnaires used for this study were adapted from previous research (Elliott et al., 2008; Kaur Sahi & Gupta, 2013; Lee & Park, 2022; Parasuraman, 2000; Venkatesh et al., 2012).

The population and target sample used for data collection were South African retail banking consumers above 18 years old with a mobile phone. Non-probability sampling was applied as a snowball sampling technique, with the survey link distributed to colleagues, friends, and family across nine provinces of South Africa. After collecting data, 362 questionnaires were received, but 24 were unusable due to not passing the pre-screening process, leaving 338 questionnaires for analysis. The present study has employed a Structural Equation Model (SEM) to scrutinise the association between

constructs. Furthermore, to examine the hypotheses and gauge the path models involving latent variables observed through multiple indicators, SPSS along with AMOS version 28 statistical software was employed. This analytical approach has enabled the researchers to investigate the intricate linkages between constructs and offer novel insights into the theoretical underpinnings of the study. The sample size of 338 was considered adequate for SEM analysis, as suggested by Bentler and Chou (1987).

RESULTS

According to the researchers' results, the demographic characteristics of age and gender play a role in using digital financial services. The results in Table 1 illustrate that most South Africans use different types of digital banking channels to perform financial and non-financial transactions. For Internet Banking channel respondents, 49.3% are males while 50.7% are females. Most respondents were from 36 to less than 45, with 37.7%. 8.2% had no formal education, 12.1% had graduated from high schools (Grade 12), 28.8% were undergraduates, 51.6% were postgraduates, 64.7% had permanent employment, 19.1% were unemployed, and 11,2% were self-employed. Finally, 27.0% have monthly income less than R20 000, 37.2% have income between R20 000 and R40 000, 26% have income between R40 001 and R60 000 and 9.3% have above R60 000.

Table 1
Demographic

		Internet Banking		Mobile Banking		Cellphone		ATM	
Gender	Male	106	49.3	117	44.3	88	44.7	69	51.1
	Female	109	50.7	147	55.7	109	55.3	66	48.9
Age	18 -25	21	9.8	26	9.8	21	10.7	17	12.6
	26-35	43	20.0	58	22	46	23.4	23	17
	36-45	81	37.7	97	36.7	68	34.5	48	35.6
	46-55	46	21.4	59	22.3	44	22.3	31	23.0
	55+	24	11.2	24	9.1	18	9.1	16	11.9
Marital Status	Single	89	41.4	106	40.2	83	42.1	53	39.3
	Married	114	53.0	145	54.9	103	52.3	75	55.6
	Separate/Devoiced	12	5.6	13	4.9	11	5.6	7	5.2
Highest Educational level	No Formal Education	14	8.2	20	7.6	13	6.6	11	8.1
	Grade 12	26	12.1	27	10.2	26	13.2	18	13.3
	Undergraduate	62	28.8	84	31.8	61	31.2	38	28.1
	Postgraduate	111	51.6	133	50.4	97	49.3	68	50.4
Employment	Permanent	139	64.7	184	69.7	126	64.0	84	62.2
	Temporarily	11	5.1	10	3.8	8	4.1	7	5.2
	Self-employed	24	11.2	22	8.3	23	11.7	17	12.6
	Unemployed	41	19.1	48	18.2	40	20.3	27	20
Income	Less than R20 000	58	27.0	86	32.6	71	36.0	51	37.8
	R20 000 -R40 000	80	37.2	86	32.6	68	34.5	43	31.9
	R40 001 – R60 000	57	26.6	71	26.9	44	22.3	31	23.0
	Above R60 001	20	9.3	21	8.0	14	7.1	10	7.4

In the mobile banking group, the proportion of females was greater than male respondents in this survey. The respondents were males (44.3%) and females (50.7 %). Most respondents were in the 26-45 age group (36.7 %). The population studied comprised graduates and postgraduates, with frequency distributions of 31.8 % and 50.4 %, respectively. Respondents with a monthly income of less than R20 .000 and respondents' incomes between R20 001 to R40 000 were the majority group (32.6 %), followed by respondents with a monthly income between R40 001 and R60 000 (26.9 %). Furthermore, concerning Cellphone banking channel users, 44.7% are males, while 55.3% are females.

Most respondents were 36 to less than 45, with 34.5%. 6.6% had no formal education, 13.2% had graduated from high schools (Grade 12), 31.2% had undergraduate degrees, 51.6% were postgraduates, 64.7% had permanent employment, 19.1% were unemployed, and 11,2% were self-employed. Finally, 27.0% have monthly income less than R20 000, 37.2% have income between R20 000 and R40 000, 26% have income between R40 001 and R60 000, and 9.3% have income above R60 000. Moreover, For ATM channel respondents, 51.1% are males, while 48.9% are females. Most respondents were from 36 to less than 45, with 35.6%. 8.1% had no formal education, 13.3% had graduated from high schools (Grade 12), 28.1% were undergraduates, 50.4% were postgraduates, 62.2% had permanent employment, 20.0% were unemployed, and 12,6% were self-employed. Finally, 37.8% have monthly income less than R20 000, 31.9% have income between R20 000 and R40 000, 23% have income between R40 001 and R60 000, and 7.4% have income above R60 000.

Table 2
Digital banking channels

Banking Mode	Frequency	Percentage
Mobile	317	93.8
Internet	219	64.8
Cell phone	199	58.9
ATM	135	39.9

According to the researcher's findings, mobile banking is the most frequently used channel, followed by internet banking, cell phone banking, and ATMs, as illustrated in Table 2. Mobile and Internet banking are data-centric technologies easily accessible anytime and anywhere through computers, tablets, and smartphones. Consequently, regarding the extent to which the channel is used daily, mobile banking is the most channel used daily, followed by the internet. Notably, ATM was the least used channel, as depicted in Table 3.

Table 3
Extended channels technologies(1=Never,6=Daily)

Banking channels	Mobile	Internet	ATM	Cell phone
Mean	4.59	3.87	3.23	3.66
Standard deviation	1.51	1.76	1.30	1.77

The model fit was tested using multiple indicators and found to be fit and satisfactory within the acceptable limit recommended by (Hu & Bentler, 1999). The measurement model results showed a chi-square ($\chi 2$) value of 330.263, with 236 degrees of freedom and a chi-square to degrees of freedom ratio ($\chi 2/df$) =1.322. The model's Comparative Fit Index (CFI) was 0.995, which exceeds the recommended cut-off of 0.90 (Hu & Bentler, 1999). The Normed Fit Index (NFI) of the model was 0.984, also exceeding the recommended cut-off (Hu & Bentler, 1999). However, it is worth noting that the Root Mean Square Error of Approximation (RMSEA) had a value of 0.022, which is higher than the recommended cut-off of ≤0.08 (Hu & Bentler, 1999). All other values were also above the recommended cut-off (Table 4).

Table 4
Depict model fit summary

Chi-square (x^2)	DF	Chi-square/df	CFI	NFI	RFI	IFI	SRMR	RMSEA
330.263	236	1.322	0.995	0.984	0.979	0.995	0.0131	0.022

According to prior researcher (Bagozzi & Yi, 1988), the quality of measurement model is determined by 1) internal consistency, (2) construct reliability, (3) convergent validity, and (4) discriminant. Consistent with previous researchers, this study tested composite reliability to measure construct reliability. The measure achieved scores ranging from 0.983 to 0.995 (see Table 5),

indicating high reliability. A score between 0.6 and 0.7 (Bagozzi & Yi, 1988) is considered a good indicator of construct reliability. In addition, the researcher tested internal consistency; the results of the reliability analysis, as depicted in Table 5, show that all Cronbach coefficients (α) were well above the 0.70 threshold (Gerrard & Barton Cunningham, 2003), As illustrated in Table 5 the values of Cronbach coefficient values were ranging from 0.979 to 0.994 suggesting a high level of internal consistency for every construct.

Table 5
Cronbach coefficient

	Factor loading	Factor Loading	CR	Cronbach (α)	Mean
Optimism (OPT)	OPT1: I believe that my preferred digital banking channel or services help to improve the quality of life.	0,930	0.995	0.994	4.218
	OPT2: My preferred digital banking channel facilitates mobility.	0,928			
	OPT3: Utilising my preferred digital channels for transactions can significantly enhance the experience and success of digital banking adoption.	0,929			
Innovativeness	INN1: It seems my friends are using digital banking than I am.	0,893	0.984	0.979	4.409
	INN2: I am updated with technology in my areas of interest.	0,903			
	INN3: In general, I am among the first of my group of friends to transact using digital banking channels.	0,900			
Insecurity (INS)	INS1: I worry that others may misuse the information I make available on my preferred digital banking channel.	0,965	0.988	0.895	1.887
	INS2: I believe that any personal transactions performed by my preferred digital banking channel should be confirmed later with a separate communication.	0,977			
	INS3: I feel insecure when I use my card numbers and bank credentials on the digital banking channel.	0,979			
Behavioural Intention (BI)	BI1: I intend to adopt my preferred digital banking in the next months	0,931	0.983	0.983	4.426
	BI2: I will use my preferred digital banking channel regularly in the future.	0,942			
	BI3: I expect to use my preferred digital banking channel to handle future financial transactions.	0,935			
	BI4: I will strongly recommend others to use my preferred digital banking.	0,935			

To assess the convergent validity in this study, the Average Variance Extracted (AVE) was used, and the results show that AVE values were significant and exceeded the 0.5 threshold, as Fornell and Larcker (1981) recommended. Similarly, to assess the discriminatory validity of this study, Maximum Shared Variance (MSV) was used. As illustrated in Table 6, the results show that MSV was lower than AVE, which means that constructs in the study have their identity and are well correlated with other constructs. If MSV is higher than AVE, it can indicate a lack of discriminant validity (Hair et al., 2019).

Table 6
Cellphone banking: Depict discriminant validity by Fornel-Lacker criterion.

Constructs	CR	AVE	MSV	OPT	INN	INS	BI
OPT	0.995	0.985	0.340	**0.992**			
INN	0.984	0.954	0.340	0.583***	**0.977**		
INS	0.988	0.966	0.033	-0.075	-0.181*	**0.982**	
BI	0.983	0.936	0.310	0.468***	0.556***	-0.182*	**0.968**

(SQRT-AVE) The square Root of the Average Variance Extracted is on the diagonal.CR criteria > 0.7 and Ave > 0.5

In addition, the study employed the HTMT criterion to assess discriminant validity. The results show that discriminant validity has been established across two constructs since HTMT values are below 0.85(Henseler et al., 2015) (See Table 7). The HTMT criterion is a stringent measure that detects possible discrimination among the latent variables.

Table 7
HTMT Analysis

	OPT	INN	INS	BI
OPT				
INN	0.578			
INS	0.067	0.175		
BI	0.460	0.544	0.178	

The study utilised path coefficient analyses to determine how personality attributes impact digital banking channel preference. Examining personality traits was crucial for understanding how bank consumers interact with self-service banking technology channels. The results in Table 8 indicate that internet banking: Innovativeness→ behavioural intention (β =0.34, t =4.287, p <0.001); Optimism → behavioural intentions (β =0.16, t =2.681, p <0.007); Insecurity→ behavioural intention (β =-0.87, t =-1.395, p >0.163). Regarding mobile banking: Innovativeness→ behavioural intention (β =0.35, t =5.082, p < 0.01); Optimism → behavioural intentions (β =0.181, t =2.681, p <0.05); Insecurity→ behavioural intention (β =-0.125, t =-2.299, p <0.021).

Furthermore, regarding cellphone banking, the results show that: Innovativeness→ behavioural intention (β =0.410, t =5.520, p < 0.01); Optimism → behavioural intentions (β =0.222, t =3.074, p <0.05); Insecurity→ behavioural intention (β -0.092, t =-1.543, p >0.123) was significant in all casual paths. Lastly, ATM results shows that: Innovativeness→ behavioural intention (β =0.279, t =2.822, p <0.05); Optimism → behavioural intentions (β =0.277, t =2.893, p <0.004); Insecurity→ behavioural intention (β =-0.08, t =-1.035, p >0.05). Based on the results, this study infers that internet banking, cellphone banking and ATM are not statistically significant. However, the mobile banking channel is statistically significant. As such, H2 was supported, and H1, H3, and H4 were not rejected. The results are consistent with the previous researcher's (Chikova et al., 2023).

Table 8
Digital banking channel preference

Hypotheses	**Digital banking Channels**	**Personality construct**	R^2	β	CR	$Pvalue$	$Results$
HI	Internet Banking	INS->BI	0.223	-0.87	-1.395	0.163	Not Supported
		INN->BI		0.34	4.287	0.001	
		OPT->BI		0.16	2.020	0.043	
H2	Mobile banking	INS->BI	0.349	-0.125	-2.299	0.021	Supported
		INN->BI		0.35	5.082	0.001	
		OPT->BI		0.181	2.681	0.007	

H3	Cellphone Banking	INS->BI	0.261	-0.092	-1.543	0.123	Not Supported
		INN->BI		0.410	5.520	0.001	
		OPT->BI		0.222	3.074	0.002	
H4	ATM	INS->BI	0.27	-0.08	1.035	0.301	Not Supported
		INN->BI		0.279	2.822	0.005	
		OPT->BI		0.277	2.893	0.004	

Notes: *** p-value < 0.01; ** p-value < 0.05; * p-value < 0.10

DISCUSSION

Overall, the coefficient of determination, also known as R-square (R^2) by prior researchers (Garson, 2016; Piepho, 2023; Straub & Gefen, 2004), explains how much of the variance of the antecedent variables are explained by the influences of the congruent variables. Results in Table 7 revealed that the (R^2) values of internet banking personality dimension (insecurity, optimism, and innovativeness), mobile banking personality dimension (insecurity, optimism, and innovativeness), Cellphone banking personality dimension (insecurity, optimism, and innovativeness and in ATM banking personality dimension (insecurity, optimism, and innovativeness) were 22.3%, 26.1%, 34.9% and 27.0%, respectively. The (R^2) values indicate that the proposed model explains the variance of intention to use the preferred digital banking channel.

With regards to path coefficient analysis, the study found that internet banking, cellphone and ATM were non-significant on personality dimension insecurity. These results are consistent with previous studies (Etim & Daramola, 2023). Although insecurity arising from dependence on banking technology can be detrimental to consumers and result in problems or interruptions during financial or non-financial transactions, the study shows that it does not significantly impact consumers' adoption of their preferred digital banking channels. This maybe that respondents have already using these channels and they are aware of the risk associated with this technology and the mitigation strategy thereof.

Contrary to internet cellphone and ATM users, mobile baking users were concerned about insecurity. The result of this study shows that insecurity negatively influences the adoption of mobile banking. The study's results were consistent with the previous study (Lee & Park, 2022). Although the insecurity construct is viewed as an inhibitor of the intention of mobile banking adoption. This is one of the critical constructs that banking institutions should address (van Niekerk & Phaladi, 2021); once the consumer has confidence in the channel, they will likely adopt or continue using it and also, and they will also spread Word of Mouse (WOM) to unbanked who perceived using mobile banking to transact will compromise their privacy. In order to instil a sense of security and confidence in online transactions, financial institutions must provide education on safe online transaction methods and potential risks. By doing so, the unbanked will be equipped to avoid such dangers and utilise online banking services with greater certainty.

Point of noting optimism and innovativeness were significant across all channels. These results are consistent with previous studies (Lee & Park, 2022; Liébana-Cabanillas & Lara-Rubio, 2017; Mahomed & Nadim, 2017; Napitupulu et al., 2018; Pires et al., 2011; Putri et al., 2021; Ramírez-Correa et al., 2019; Smit et al., 2018). Their optimism level was higher than their innovativeness. It is assumed that because of optimism, customers will use digital banking channels more frequently and focus on positive outcomes. Innovativeness will compel them to try and use digital banking channels. This finding indicated that digital banking innovativeness. improves service quality and customer convenience. Consequently, mobile banking consumers find that the advantages lie in time-effectiveness, convenience, safety, operational simplicity, and ease of navigation. These help enrich their digital banking channel experience and have the potential to increase the adoption of SSTs in the form of digital banking channels.

The study suggests that mobile banking channels can be a powerful indicator of users' preferences for various banking channels, such as internet banking, ATM, and cell phone banking. Financial institutions must critically examine their mobile banking platforms and provide various services to support an end-to-end customer experience. Banks must continue to promote the benefits of mobile banking, including convenient access, time-saving, and the ability to conduct basic banking tasks.

CONCLUSION

The current study highlights the significance of consumers' personalities in shaping consumer behaviour, especially in the context of new technology adoption. The study reveals that TRI attributes explain individuals' readiness to adopt new technologies. Marketers and businesses can use these findings to understand consumer behaviour better and develop strategies to promote technology adoption. Future research could investigate how additional personality traits interact with TRI attributes in shaping consumer behaviour. Insecurity was a notable factor that reduced the intention to use mobile banking. The results imply that financial institutions need to eliminate potential customers' inconvenience and insecurity perceptions caused by personal information loss and hacking, possibly due to online-only transactions without in-person contacts.

To accommodate customers' needs – including in-person contacts, improvements in contact-free online services using mobile phones (smartphones, tablets) are necessary. The awareness regarding the same use of mobile banking and the risk factors such as insecurity, cybercrime and system. Data from the current study were collected using non-probability in the form of snowballing. However, this could have a negative effect on the generalizability of the results. Consequently, it would be worthwhile for future studies to use different sampling techniques, such as clustering, to capture more generalizability of the banking consumers in South Africa. errors should be communicated continually with both potential and existing customers.

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Research ethic statement

The authors declare that this study was not submitted for evaluation in another journal simultaneously with the CBR or previously published in another journal.

Disclosure statement

The authors declare that the research was conducted without commercial or financial relationships that could create a conflict of interest.

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