Antecedents of Trust in Mobile Banking Amongst Generation Y Students in South Africa

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Abstract: The purpose of this study was to determine the influence of perceived structural assurance concerning mobile banking, information and system quality of mobile banking, integrity of the mobile bank, trust propensity and perceived ease of use and usefulness of mobile banking on South African Generation Y students' trust in mobile banking. The study followed a descriptive research design, using a single cross-sectional approach. A self-administered survey questionnaire was used to collect data from a convenience sample of 334 students registered at three public South African university campuses. The results suggest that Generation Y students' perceived structural assurance, integrity of a bank, trust propensity and ease of use of mobile banking all have a statistically significant positive influence on their trust in mobile banking. However, their perceived information and system quality, as well as their usefulness of mobile banking has a positive yet non-significant influence on their trust in mobile banking. Understanding Generation Y students' trust in mobile banking will assist retail banking marketers and strategists in their efforts to formulate strategies that will foster trust in their mobile channels amongst customers of this cohort and, in doing so, promote greater mobile banking penetration. This paper also fulfils an identified need to study the antecedents of trust in mobile banking, especially amongst the South African youth.

Keywords: Trust; mobile banking; Generation Y students; South Africa

JEL Classification: G21

1. Introduction

The banking industry's traditional business model, which comprises brick-and-mortar banking, continues to contribute to a retail bank's success and remains an important distribution channel. However, challenges such as distribution channel mix transformation and integration (Kanchan et al., 2012), an increase in business operations and operating costs (Martins et al., 2014), competition for market share (Arnaboldi & Claeys, 2008), as well as changing consumer behaviour brought about by the digital revolution (Standard Bank, 2015), encourage retail banks to consider innovative ways to deliver their banking services (Arnaboldi & Claeys, 2008). As such, retail banks are continuously developing their distribution channels,

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specifically their digital banking channels, including mobile banking, to reach their customers (PwC, 2014).

Mobile banking primarily comprises retail banks providing their services employing the wireless Internet gateway (WIG) and the wireless application protocol (WAP) through mobile applications downloaded onto a customer's mobile device, such as an iPad or tablet, mobile phone or personal digital assistant (PDA) (Nel et al., 2012). Mobile banking is an innovative tool that drives current and future revenues, reduces service costs and maintains and improves customer service (Ernst & Young, 2015). Additionally, retail banks that operate in emerging economies, such as South Africa, can benefit from low-cost digital distribution channels, including mobile banking, as the mobile channels offer retail banks the opportunity to connect the unbanked population to the financial mainstream, thereby reaching new customers (Ismail & Masinge, 2012).

While mobile banking offers customer advantages such as convenience, efficiency and cost-savings (Lin, 2011), it remains cybernetic and, therefore, is associated with a certain degree of uncertainty and often perceived as risky (Kim et al., 2009). Moreover, mobile banking increases retail banks' interpersonal distance from their customers, which may lead to trust concerns (Benamati & Serva, 2007). In addition, the lack of trust in mobile banking amongst customers may seriously impede the growth in a retail bank's mobile banking penetration. As such, it is important that retail banks gain and maintain a particular level of trust. Aspects such as the structural assurances concerning mobile banking (Gu et al., 2009; Kim et al., 2009; Zhou 2011), information and system quality of mobile banking (Zhou, 2011; 2012a; 2012b), integrity of the mobile bank (Kabir, 2013; Robert & Rubert, 2013) and the ease of use (Gu et al., 2009; Lin et al., 2011) and usefulness of mobile banking (Kim et al., 2009; Lin et al., 2011) are likely to allay customers' uncertainty associated with the use of mobile banking and foster greater trust in this banking channel.

Internationally and in South Africa, the Generation Y cohort, which includes individuals born between 1986 and 2005 (Markert, 2004), represents a noteworthy current and future market segment for a number of sectors, including the retail banking sector. In 2017, the South African population was estimated at approximately 56.52 million, of which roughly 36 percent was represented by the Generation Y cohort (Statistics South Africa, 2017). This generation grew up using technology and, therefore, is hyper-connected to each other (Deloitte, 2010) and highly technologically astute (Van Deventer et al., 2014), suggesting that this cohort is also likely to adopt new technology (Deloitte, 2010). Many Generation Y consumers are first-time bankers that are on the lookout for the newest digital channels to satisfy their banking needs (KPMG South Africa, 2014). As such, this generation drives digital finance and is salient to the retail banking sector and their digital banking channels, including mobile banking. Research suggests that

Generation Y is at ease with using self-service banking channels, including mobile banking (IT news Africa, 2015). This, in combination with this generational cohort paving the way forward in adopting all things mobile (Deloitte, 2010) and their significant size makes them a current and future market segment of significant importance and value to retail banks and their mobile banking offerings. The Generation Y student cohort is a market segment of particular importance given the higher earning potential and social status generally associated with graduate education. Generation Y students are therefore often perceived as opinion leaders and trendsetters amongst their peers (Bevan-Dye & Akpojivi, 2016). Through better understanding the factors that influence the student portion of the Generation Y cohort's trust in mobile banking, retail banks can rethink and develop their digital channel strategy according to the needs of this cohort.

An extensive literature review on digital banking outlines a number of studies pertaining to Internet banking in developed economies such as Australia (Heaney, 2007), the United Kingdom (Littler & Melanthiou, 2006), and the United States of America (Vatanasombut et al., 2008). Similarly, in South Africa, a review of the literature points towards various Internet banking studies (Brown et al., 2004; Maduku, 2013; Redlinghuis & Rensleigh, 2010). However, the number of South African studies concerning mobile banking are limited, with studies uncovering mobile banking adoption predictors (Brown et al., 2003; Ismail & Masinge, 2012; Nel et al., 2012), attitudes towards mobile banking (Maduku & Mpinganjira, 2012; Nel & Raleting, 2012) and the influence of perceived utility and risk trade-offs on customers' willingness to continue using mobile banking (Njenga & Ndlovu, 2013). Upon searching four large online academic databases, namely EBSCOhost, Emerald, Google Scholar and Sabinet Reference, no study could be found that determined the influence of several factors on trust in mobile banking within the South African context. In addition, the search revealed no evidence of studies concerning trust in mobile banking using the significantly sized Generation Y cohort in general, and the Generation Y student population in particular as the target population. To address this gap in the literature, the purpose of the study reported in this article was to determine the influence of various factors, including perceived structural assurance concerning mobile banking, perceived information and system quality of mobile banking, perceived integrity of the mobile bank, trust propensity and perceived ease of use and usefulness of mobile banking on Generation Y students' trust in mobile banking channels in the South African context.

2. Literature Review

2.1. Structural Assurance Concerning Mobile Banking

Unlike other digital banking channels, the mobile banking channel operates on mobile networks, which makes this channel particularly open to risks such as hacker attacks, information interception, network failures, viruses and Trojan horses (Zhou, 2011). To reduce these system risks and protect mobile banking customers against financial, identity and privacy loss, it is important that retail banks have sufficient safeguards in place (Zhou, 2012a). "Structural assurance is information that can be used to give a web services provider or requestor the confidence that measures exist that can provide safeguards and reduce the risk when something goes wrong" (Coetzee & Eloff, 2005, p. 501). Structural assurances include safeguards such as legal contracts, guarantees, formal agreements, policies and promises (Lin et al., 2011). The availability of these structural assurances discourages opportunistic behaviours and perhaps, more importantly, instils confidence and trust in mobile banking. Structural assurance has been found to positively influence trust in mobile brokerage services (Lin et al., 2011) and Internet banking (Nor and Pearson, 2008). Moreover, previous research suggests that traditional offline banking influences online banking structural assurance (Lee et al., 2007). In a mobile banking context, structural assurances guarantee the reliability of financial transactions, individual privacy protection and transactional confidentiality (Kim et al., 2009), all of which build and positively influence trust in mobile banking. Indeed, a number of mobile banking studies (Gu et al., 2009; Kim et al., 2009; Zhou, 2011) with empirical support suggest that structural assurances positively influence customers' trust in mobile banking. As such, this study suggests that those customers who believe that they are legally protected against financial, privacy and identity loss when using mobile banking will likely trust mobile banking more; that is:

H1: Structural assurances positively influences trust in mobile banking.

2.2. Information and System Quality of Mobile Banking

Information quality refers to the accuracy, relevancy, timeliness and adequacy of information (Zhou, 2013), whereas system quality signifies the network and access speed, stability (Gu et al., 2009), visual appeal and navigation of a system (Zhou, 2013). In the context of mobile banking, customers that receive or access information that is inaccurate, irrelevant, outdated or incomplete, may question both the integrity of the bank and its ability to offer quality mobile banking services, which, in turn, may negatively influence their trust in mobile banking. Similarly, customers that find it difficult to navigate the mobile banking system due to a poor interface design may perceive the retail bank as unreliable and untrustworthy (Zhou, 2011). As such, it is important that retail banks invest adequate resources in their mobile banking channel

to guarantee information and system quality and, in doing so, earn customers' trust in this banking channel. Information quality has been identified as a factor that positively influence user trust in health informediaries (Zahedi & Song, 2008), inter-organisational data exchange (Nicolaou & McKnight, 2006) and mobile brokerage services (Lin et al., 2011). Furthermore, both information and system quality were found to be positive predictors of the overall service quality of Web portals (Yang et al., 2005). In their study, Vance *et al.,* (2008) discovered that system quality, including the navigational structure and visual appeal influences users' trust in mobile commerce technologies. Extant mobile banking studies (Zhou, 2011; 2012a; 2012b) confirm that sufficient information and system quality positively influences customers' trust in mobile banking. In line with the findings of these studies, this study postulates that those customers who believe that mobile banking provides reliable and accurate information will likely display a trustworthy attitude towards mobile banking; that is, adequate system quality positively influences trust in mobile banking. Furthermore, this study proposes that mobile banking users who perceive mobile banking as easy to navigate and believe that the system is stable for financial transactions will likely trust mobile banking more. Hence:

H2: Information quality positively influences trust in mobile banking.

H3: System quality positively influences trust in mobile banking.

2.3. Integrity of Retail Banks that Offer Mobile Banking

In a retail banking context, integrity refers to a retail bank's adherence to a set of principles that are generally considered acceptable (Kabir, 2013). Integrity signifies the retail bank's credibility in their undertakings with their customers, their commitments made to their customers (Masrek et al., 2012), their ethical behaviour towards their customers, as well as their promise to provide a safe and secure banking environment (Nor & Pearson, 2008). In the context of mobile banking, the rules that govern integrity comprise maintaining the confidentiality of customers' personal information, providing customers with accurate, reliable and timely information (Lin, 2011) and assuring customers that the mobile virtual environment is safe and secure for financial transacting (Nor & Pearson, 2008). These integrity rules are important to influence customers' trust in mobile banking positively. In addition, retail banks that have earned the reputation of having integrity portray an image of objectivity, strong justice and honesty (Lin, 2011). Extant research on trust in e-commerce validate the influence of integrity on trust (Sharif et al., 2005), including Internet banking (Nor & Pearson, 2008). Previous studies conducted on mobile banking (Kabir, 2013; Robert & Rubert, 2013) found that having integrity positively influences trust in mobile banking. Consistent with these studies, this study theorises that those customers who perceive their retail bank as trustworthy and honest will likely trust their mobile banking channel. Thus:

H4: Integrity of the retail bank positively influences trust in mobile banking.

2.4. Trust Propensity

Propensity to trust, also referred to as disposition to trust, is described as a personality-based trust that explains why some individuals believe or disbelieve other individuals and their willingness to depend on others across a wide spectrum of situations (McKnight et al., 2002). As such, trust propensity represents individuals' tendency to believe that others are generally dependable and trustworthy (Kumar et al., 2012). Although trust propensity is a rather new concept in the information systems domain, it has important implications for both theory and practice. This is because trust propensity will arguably assist with understanding the role of personality traits in consumer-based mobile commerce, such as mobile banking. In a mobile banking context, individuals with greater trust propensity are more likely to feel at ease and safe with using mobile banking (Luo et al., 2010). In addition, those individuals with high trust propensity are more inclined to display positive attitudes towards mobile banking and will more readily build trust in mobile banking (Zhou, 2011). Gefen's (2000) research on Amazon.com and McKnight *et al*.'s (2002) study on Internet retail stores suggest that trust propensity influences trust. The research findings of Kim and Prabhakar (2004) as well as Nor and Pearson (2008) on Internet banking infer that trust propensity has a positive influence on trust. Given the results of these studies, this study postulates that high trust propensity positively influences trust in mobile banking. Numerous studies on mobile banking (Kim et al., 2009; Zhou, 2011; Chiu et al., 2017) verify this relationship between trust propensity and trust and that trust propensity positively influences trust in mobile banking. Therefore:

H5: Trust propensity positively influences trust in mobile banking.

2.5. Ease of Use and Usefulness of Mobile Banking

Ease of use refers to the level of difficulty that an individual experience when using information technology, whereas usefulness denotes the benefits and effectiveness of a technological innovation (Davis, 1989). These two constructs are based on measures to determine how information technology allow individuals to perform tasks quicker, as well as generate better performance, and increase work efficiency and productivity (Munoz-Leiva, 2017). In addition, an innovation that is useful and easy to use would attract customers to it (Nor & Pearson, 2008) and bolster their trust in the innovation. According to the technology acceptance model (TAM) developed by Davis (1989), attitude towards using a specific technology or innovation is determined by perceived ease of use and usefulness. Both ease of use and usefulness were found to positive predictors of attitudes towards online airline ticket purchases (Guritno & Siringoringo, 2013) and attitudes towards using Internet banking (Nor & Pearson, 2008). A number of international mobile banking studies (Wessels & Drennan, 2010; Akturan & Tezcan, 2012) also verify the relationship between ease of use, usefulness and attitudes towards using mobile banking.

However, evidence from previously published studies also suggests that both ease of use (Gu et al., 2009; Lin et al., 2011) and usefulness (Kim et al., 2009; Lin et al., 2011) are important determinants of trust in mobile commerce. In keeping with the postulations made by these studies, this study suggests that the ease of use and usefulness of mobile banking positively influences customers' trust in mobile banking. Thus:

H6: Ease of use positively influences trust in mobile banking.

H7: Usefulness positively influences trust in mobile banking.

3. Research Model

Existing theoretical and empirical studies highlight the importance of trust in mobile banking. The proposed research model as depicted in Figure 1 investigates how selected antecedents influence South African Generation Y students' trust in mobile banking. In accordance with the literature, all the antecedents are presumed to have a direct positive influence on trust in mobile banking.
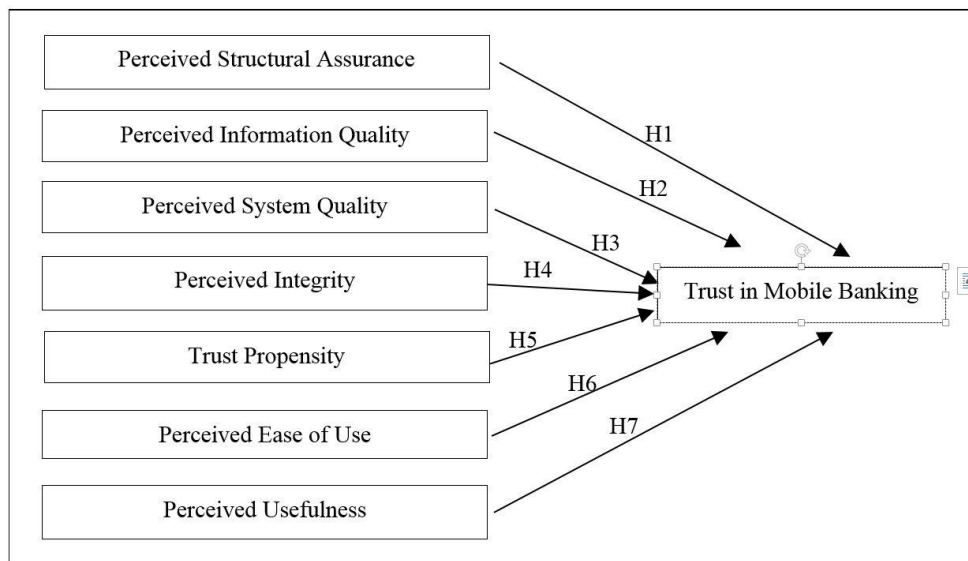

Figure 1. Research Model

4. Research Methodology

4.1. Participants

The target population for this study were Generation Y students between the ages of 18 and 24 years, enrolled at South African public higher education institutions (HEIs). A judgement sampling method was used to narrow down the initial sampling frame of the 26 registered South African public HEIs to three HEI campuses situated in the Gauteng province. These campuses included one campus from a university of technology, one from a traditional university and one from a comprehensive university. Thereafter, a non-probability convenience sample of 450 students (150 students per campus) was used to carry out this study. This sample size is in line with sample sizes of previously published studies of a similar nature, such as a sample size of 403 (Hanafizadeh et al., 2014) and 435 (Akturan & Tezcan, 2012).

Of the 450 questionnaires handed out, a total of 334 complete and usable questionnaires were returned. This equates to a response rate of 74 percent. Of the participants, 37.2 percent were from a traditional university, 33.2 percent from a comprehensive university, and 29.6 percent were from a university of technology. The sample included participants from each of the seven age groups specified in the target population and comprised more female than male participants. Participants from each of South Africa's four race groups made up the sample. In addition, the sample comprised participants from each of the country's 11 official language groups and nine provinces. A description of the sample participants is presented in Table 1.

Table 1. Sample Description

	Percent (%)		Percent (%)		Percent (%)
Age		**Language**		**Province**	
18	6.9	Afrikaans	9.3	Eastern Cape	2.1
19	14.1	English	7.5	Free State	10.8
20	25.7	IsiNdebele	.3	Gauteng	57.2
21	24.9	IsiXhosa	6.9	KwaZulu-Natal	2.7
22	14.4	IsiZulu	14.7	Limpopo	11.4
23	8.7	Sepedi	8.4	Mpumalanga	6.3
24	5.4	Sesotho	26.3	Northern Cape	.6
Gender		Setswana	13.2	North-West	7.2
Female	58.1	SiSwati	3.9	Western Cape	1.8
Male	41.9	Tshivenda	4.5	**Institution**	
Ethnicity		Xitsonga	4.8	Traditional	37.2
Black/African	84.1			Comprehensive	33.2
Coloured	2.4			Technology	29.6
Indian/Asian	2.7				
White	10.8				

4.2. Research Instrument

A survey self-administered questionnaire was employed to gather the necessary data. The questionnaire consisted of a cover letter, which detailed the purpose of the study as well as two sections. The first section covered demographical questions, whereas the second section included scaled items from published studies that were adapted to reflect trust in mobile banking. Five possible antecedents, namely perceived ease of use of mobile banking, usefulness of mobile banking, integrity of the mobile bank, structural assurance concerning mobile banking and trust in mobile banking were measured using the Internet banking adoption scale (Nor & Pearson, 2008). The remaining three antecedents of trust propensity, perceived information and system quality of mobile banking were measured using the Zhou (2011) initial trust in mobile banking scale. While each antecedent consisted of three items, perceived usefulness comprised four items. A six-point Likert-type scale, ranging from strongly disagree (1) to strongly agree (6) was used to record the 25-scaled responses.

4.3. Research Design

The study followed a descriptive research design, using a single cross-sectional approach.

4.4. Data Collection Procedure

Using the mall-intercept survey technique, three post-graduate students trained as fieldworkers distributed the survey questionnaires to the students at each of the three campuses. Students were duly informed that participation in the study was on a voluntary basis only and that the privacy of any information provided would be assured.

4.5. Ethical Considerations

The proposed study and questionnaire was submitted to the Ethics Committee of the Faculty of Economic Sciences and Information Technology at the Vaal Triangle Campus of the North-West University for ethical approval and was awarded an ethics clearance certificate (Ethics Clearance Number: ECONIT-ECON-2014-005). In addition, the questionnaire's cover letter explained that participation in the study is voluntary and assured the confidentiality of the participant's information.

5. Data Analysis

The IBM Statistical Package for Social Sciences (SPSS), Version 24 for Windows was used to analyse the captured data. Data analysis included descriptive statistics, reliability and validity measures, Pearson's product-moment correlation analysis, collinearity diagnostics and regression analysis.

6. Results

6.1. Descriptive Statistics and Reliability Measures

The means and standard deviations were calculated for each of the constructs. As a measure of internal consistency reliability of the scale, the Cronbach's alphas were computed for the entire scale as well as each of the individual constructs. A summary of the descriptive statistics and reliability measures are provided in Table 2.

Most of the constructs calculated mean values above 3.5, which, on a six-point Likert-type scale, suggests that Generation Y students perceive mobile banking as useful (mean = 5.193) and easy to use (mean = 4.705). Furthermore, the students trust that mobile banking can provide relevant, adequate and quality information (mean = 4.630) and that the mobile banking system is user-friendly (mean = 4.605). Moreover, Generation Y students report that they trust mobile banking (mean = 4.284) and that mobile banking has sufficient structural assurances (mean = 4.267). In addition, Generation Y students believe that those retail banks that provide mobile banking are likely to keep the promises they make, be honest and act ethically (mean = 3.949). The results also indicate that Generation Y students generally trust other people (mean = 3.001).

Table 2. Descriptive Statistics and Reliability Measures

Constructs	Means	Standard Deviations	Cronbach's Alphas
Perceived usefulness	5.193	.764	.825
Perceived ease of use	4.705	1.069	.856
Perceived information quality	4.630	.982	.889
Perceived system quality	4.605	.910	.730
Trust	4.284	1.261	.893
Perceived structural assurance	4.267	1.152	.880
Perceived integrity	3.949	1.104	.877
Trust propensity	3.001	1.215	.792

A Cronbach alpha value of 0.837 was recorded for the entire scale. Moreover, all the Cronbach alpha values of the individual constructs exceeded the recommended level 0.70 (Hair et al., 2010), thereby suggesting acceptable internal consistency reliability. In addition, the entire scale returned an inter-item correlation coefficient of 0.406, which is in the recommended range of 0.15 and 0.50 (Spiliotopoulou, 2009). As such, the measuring instrument may be considered reliable and valid.

6.2. Correlation Analysis

To determine whether there was a relationship between the constructs, Pearson's product-moment correlation coefficients were calculated. The results are presented in Table 3.

Table 3. Correlation Analysis

Constructs	1	2	3	4	5	6	7	8
Perceived Structural Assurance	1	.672**	.583**	.430**	.195**	.643**	.438**	.481**
Perceived Information Quality		1	.672**	.384**	.164**	.544**	.366**	.587**
Perceived System Quality			1	.408**	.199**	.507**	.440**	.589**
Perceived Integrity				1	.331**	.467**	.244**	.275**
Trust Propensity					1	.281**	.132**	.105*
Trust						1	.436**	.417**
Perceived Ease of Use							1	.385**
Perceived Usefulness								1

**Correlation is Significant at the .01 Level (1-Tailed)
*Correlation is Significant at the .05 Level (1-Tailed)

As is evident from Table 3, there were statistically significant positive relationships between each of the pairs of constructs. The strongest relationship occurred between perceived structural assurance and information quality, as well as between perceived information quality and system quality ($r = 0.672$, $p < 0.01$). This suggests that the higher the perceived structural assurance, the higher the perceived information quality of mobile banking. Similarly, the higher the perceived information quality of mobile banking, the higher the perceived system quality of mobile banking. These statistically significant associations between each pair of constructs in a direction that makes sense denote the nomological validity of the measurement theory in this study. In addition, none of the correlation coefficients exceeded 0.90, which eliminates the possibility of multicollinearity (Hair et al., 2010). Collinearity diagnostics, as outlined in Table 4, were performed on the independent variables with the case number serving as the dummy dependent variable to look for more subtle forms of multicollinearity.

Table 4. Collinearity Diagnostics

Independent Variables	Tolerance Values	VIF
Perceived Usefulness	.570	1.754
Perceived Ease of Use	.718	1.392
Perceived Information Quality	.395	2.532
Perceived System Quality	.440	2.271
Trust	.494	2.023

Perceived Structural Assurance	.415	2.407
Perceived Integrity	.693	1.443
Trust Propensity	.866	1.154

As shown in Table 4, all the tolerance values were above the cut-off level of 0.10, ranging from 0.395 to 0.866 and the average variance inflation factor (VIF) of 1.87 below the cut-off of 10, which suggests that there was no obvious evidence of multicollinearity (Pallant, 2010).

6.3. Regression Analysis

Multivariate regression analysis was undertaken to determine the influence of perceived structural assurance, information quality, system quality, integrity, ease of use, usefulness and trust propensity on Generation Y students' trust in mobile banking. Table 5 reports on the regression model summary and ANOVA results.

Table 5. Regression Model Summary and ANOVA Results

	R	R^2	Adjusted R^2	F	p-value
Model 1	.711	.506	.495	47.641	.000

As indicated in Table 5, the significant F-ratio (p q 0.01) suggests that the regression model predicts trust in mobile banking. The R^2 value denotes that almost 51 percent of the variance in Generation Y students' trust in mobile banking is explained by the seven independent variables. The following step evaluated the contribution of each construct to the prediction of trust in mobile banking, as reported on in Table 6.

Table 6. Contribution of Independent Variables to Predicting Trust in Mobile Banking and Hypothesis Testing Results

Independent Variables	Standardised Beta Coefficients	t-values	p-values	Hypothesis	Hypothesis Testing Result
Perceived Structural Assurance	.369	6.498	.000*	H1	Supported
Perceived Information Quality	.113	1.825	.069	H2	Not supported
Perceived System Quality	.041	.699	.485	H3	Not supported
Perceived Integrity	.168	3.656	.000*	H4	Supported
Trust Propensity	.104	2.517	.012*	H5	Supported
Perceived Ease of Use	.146	3.223	.001*	H6	Supported
Perceived Usefulness	.036	.703	.483	H7	Not supported

*Significant at the .05 Level (2-Tailed)

Table 6 and Figure 2 shows that perceived structural assurance ($\beta = 0.369$, $p = 0.000 < 0.05$), perceived integrity ($\beta = 0.168$, $p = 0.000 < 0.05$), trust propensity ($\beta = 0.104$, $p = 0.012 < 0.05$) and perceived ease of use ($\beta = 0.146$, $p = 0.001 < 0.05$) all had a statistically significant positive influence on Generation Y students' trust in mobile banking, which supports hypotheses H1, H4, H5 and H6. However, perceived information quality ($\beta = 0.113$, $p = 0.069 > 0.05$), perceived system quality ($\beta = 0.041$, $p = 0.485 > 0.05$) and perceived usefulness ($\beta = 0.036$, $p = 0.483 > 0.05$) had

a positive yet non-significant influence on this cohort's trust in mobile banking, and as such, hypotheses H2, H3 and H7 was not supported. The largest beta coefficient was recorded for perceived structural assurance, which means that this construct makes the strongest contribution to explaining Generation Y students' trust in mobile banking.
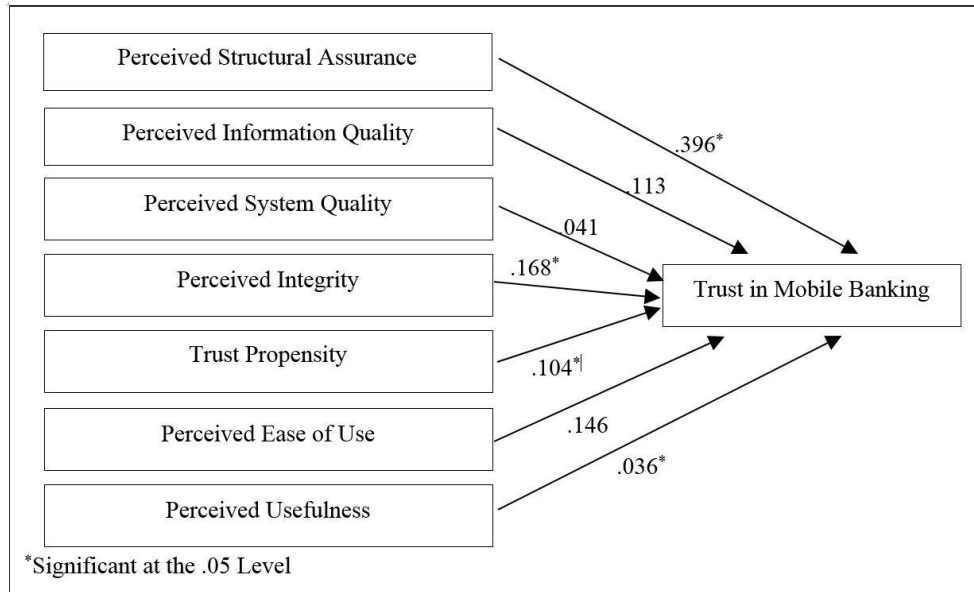

Figure 2. Hypothesis Testing Results

7. Discussion

This study considered the antecedents of trust in mobile banking amongst South African Generation Y students. Retail banks can use the insights gained from this study to foster greater trust in their mobile channels to ensure increased mobile banking penetration. The results of the study suggest that perceived structural assurance, information and system quality, ease of use and usefulness, integrity of the retail bank and trust propensity are positively associated with trust in mobile banking. Consistent with the literature, perceived structural assurance, perceived integrity, trust propensity and perceived ease of use were found to be significant positive predictors of trust in mobile banking. Of the four, structural assurance was found to be the strongest predictor of trust in mobile banking amongst Generation Y students. This result is not without grounds, as several studies (Gu et al., 2009; Kim et al., 2009) found structural assurance to have the largest effect on trust in mobile banking. While perceived information quality, system quality and usefulness had a

positive influence on Generation Y students' trust in mobile banking it was statistically insignificant. This may be because customers that perceive an innovation as having system and information quality as well as being useful may display a positive attitude towards the innovation. Previous studies (Kleijnen et al., 2004; Olatokun & Owoeye, 2012) support the assertion that system quality influences attitudes towards mobile banking, rather than trust in mobile banking. Similarly, Talukder *et al*. (2014) opine that system quality refers to both the technical and information quality of the mobile system. Therefore, it may be inferred that information quality also positively influences attitudes towards mobile banking. In addition, Nor and Pearson (2008) theorise that customers are likely to have a positive attitude towards an innovation that is useful. Indeed, several studies (Lin, 2011; Sayid et al., 2012; Shanmugam et al., 2014) validate that the usefulness of mobile banking positively influences attitudes towards mobile banking and not necessarily trust in mobile banking.

In light of the results, it is important that retail banks offer and develop a number of assurance programmes and technologies, such as third party certifications and advanced encryption that safeguard customers from both financial and information losses, with the intention of mitigating the uncertainties and perceived risks associated with the use of mobile banking and to earn customers' trust early in the mobile banking adoption process. In addition, it is suggested that retail banks deliver banking services as promised and that they display a truthful and fair attitude in all their financial dealings with their customers. In doing so, retail banks are in a better position to earn a reputation of having integrity, which is likely to boost customers' trust in both the retail bank itself and their mobile banking channel, which, subsequently, may stimulate greater mobile banking penetration. Furthermore, the results suggest that Generation Y customers are likely to embrace the use of mobile banking given their propensity to trust and their willingness to accept higher risks. Retail banks, therefore, are advised to focus on target marketing rather than generalised marketing of mobile banking to those customers who fit the trust profile. This may also be a more cost effective approach in broadening the retail banks' customer base. Moreover, retail banks are encouraged to seek ways to improve the simplicity of their mobile banking channel, such as introducing a hand free, voice command feature or a live chat platform. Efforts invested in making mobile banking easier to use may help build customers' trust in this banking channel. Although perceived information quality, system quality and usefulness did not have a direct influence on Generation Y students' trust in mobile banking they still consider it important. As such, it is recommended that retail banks constantly add new value offerings that will reflect both information relevancy and accuracy as well improved system functionality to their current mobile banking channel.

8. Limitations and Future Research

The study's participants were surveyed using non-probability convenience sampling, which limits the objective assessment of the findings. Furthermore, the study used a single cross-sectional research design, which only offers a momentary observation in time. As such, a longitudinal study may produce more accurate results for this type of study and could be considered as a future research opportunity.

9. Conclusion

Although mobile banking offers several advantages, it remains cybernetic. As such, mobile banking is associated with some degree of risk and uncertainty, which highlights the significance of trust in fostering greater mobile banking penetration. Therefore, the purpose of this study was to determine the antecedents of trust in mobile banking amongst South African Generation Y university students. The study concluded that while perceived structural assurance, integrity of the retail bank, ease of use and trust propensity had a statistically significant positive influence on Generation Y students' trust in mobile banking, their perceived information quality, system quality and usefulness had a positive yet non-significant influence on their trust in mobile banking. Understanding Generation Y students' trust in mobile banking will assist policy makers, marketers and strategists within the retail banking domain in their efforts to formulate strategies that will foster trust in their mobile channels amongst customers of this cohort and, in doing so, promote greater mobile banking penetration.

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