Motivational factors, customer engagement and loyalty in the South African mobile instant messaging environment: Moderating effect of application usage

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Abstract

Purpose – The purpose of this paper is to examine specific gratifications obtained from using mobile instant messaging (MIM) applications by applying the uses and gratifications (U&G) theory. This study explores the relationships between motivational factors, customer engagement and loyalty for existing WhatsApp subscribers in South Africa, as well as the moderating effect of application usage.

Design/methodology/approach – A descripto-explanatory research design was utilised in this quantitative study and 282 responses from an online survey were analysed. Structural equation modelling was used to test the study's hypotheses.

Findings – The study reveals that utilitarian and hedonic motivation impact customer engagement positively in using WhatsApp, which in turn impact loyalty. Social motivation in using WhatsApp bore no relationship with customer engagement. Furthermore, medium application usage moderates the link between customer engagement, and utilitarian and hedonic motivation.

Research limitations/implications – The study offers a greater understanding into customer engagement and motivational factors in the MIM environment. Future studies could consider more complex relationships with customer engagement in using MIM apps focussed on a younger generation.

Practical implications – MIM service providers should enhance customer engagement by keeping track of usage activity and by identifying customers who need to use an app more by targeting their utilitarian and hedonic needs through sophisticated marketing strategies.

Originality/value – This research enriches the understanding of key motivational factors impacting customers' continued engagement towards using MIM, as opposed to the adoption thereof.
Keywords – Mobile instant messaging, motivational factors, customer engagement, customer loyalty, application usage.

Paper type – Research paper

Introduction

Mobile instant messaging (MIM) has changed the way millions of users communicate worldwide. Instant messaging (IM) apps enable customers to send and receive text messages, videos, photos and audio on smart devices in real time (Oghuma *et al.*, 2016). Most MIM applications (e.g., WhatsApp, WeChat, Snapchat, Facebook Messenger) operate on diverse operating systems (e.g., Android, iOS, Windows) and have become a platform for entertainment and work (Marino and Lo Presti, 2018; Karapanos *et al.*, 2016; Wu and Lu, 2013). Previous generations of MIM apps that were popular in South Africa (SA) include ICQ (Leung, 2001) and Mxit (Alfreds and Van Zyl, 2015; Chigona and Chigona, 2008). MIM apps offer ease of use to customers of different ages and profiles, and Church and de Oliveira (2013) have indicated that the cost of using WhatsApp compared to a short message service (SMS) influences the frequency of use of the platforms.

SA's cellular industry is highly competitive (MyBroadband, 2019) and to maintain a competitive edge in the market, operators rethink customer trends and behaviours when choosing mobile app products and services (Bitter *et al.*, 2014; Dovaliene *et al.*, 2016; Harris *et al.*, 2016; Kim, Kim *et al.*, 2013). SA's cellular industry has more than 90 million active subscribers (McKane, 2020), and approximately 37% of the population in 2020 were active users of social media (Statista, 2020a), with WhatsApp being the most popular ~~used~~ messaging platform (Statista, 2020b). Subscriber behaviour continues to change as mobile app and

smartphone subscriptions grow worldwide, which requires operators' market expectations to be reviewed continuously. It is important for companies to determine not only how customers adopt new MIM apps (Lu *et al.*, 2010), but also how customers engage with the apps after adoption (Deng *et al.*, 2010). Companies can create a sustainable competitive advantage if they can determine the key factors influencing the engagement of MIM apps.

Thus far, literature has focused on the technology adoption of IM applications and the value factors leading to satisfaction and intention to use. Oghuma *et al.* (2016) used the expectation-confirmation model to show that perceived usability and service quality significantly influenced continuance intention to use MIM apps in addition to user satisfaction. Zhou and Lu (2011) indicated that flow experience and network externality significantly affect perceived satisfaction and usefulness, as well as loyalty. Furthermore, Lu *et al.* (2010) examined users' acceptance of IM utilising the theory of planned behaviour, flow theory, and the technology acceptance model, and concluded that users' perceived enjoyment and usefulness significantly influenced their intention and attitude to use IM apps. Moreover, Deng *et al.* (2010) examined several antecedents of customer loyalty and satisfaction in using MIM apps, including trust, perceived service quality, monetary value, social value, emotional value and functional value.

Several studies have also analysed the use of IM applications in the healthcare sector (Drake *et al.*, 2016), as an aid for improving customer relationship management (Marino and Lo Presti, 2018), and a tool for educational activities (Bouhnik and Deshen, 2014). Although literature has focused on technology adoption of IM apps and the factors leading to satisfaction and intention to use, few attempts have been made to ascertain whether customer engagement and its dimensions affect customer satisfaction and loyalty in an IM setting (Deng *et al.*, 2010; Hernandez-Ortega *et al.*, 2017; Marino and Lo Presti, 2018; Tsai and Men, 2018). Research has

yet to look at motivational factors impacting customer engagement in a MIM setting, while assessing their contribution to customer loyalty.

This study investigated key gratifications obtained from using MIM applications by applying the Uses and Gratifications (U&G) theory. Furthermore, the research examined the association amongst motivational factors and customer engagement, and customer engagement and customer loyalty for existing WhatsApp subscribers in SA. In this study, the focus was on examining customer engagement and loyalty with WhatsApp itself and not with those using the mobile app. Customer usage patterns may influence relationships among theoretical constructs. For example, MIM providers can tailor applications to target specific marketing segments to increase customer engagement, but they need to first understand the moderating effect of these customer characteristics. Deng *et al.* (2010) indicated that 'satisfied users will have a higher usage level of MIM service than those who are not satisfied' (p. 290), with Sashi (2012) arguing that 'Satisfaction is a necessary condition for customer engagement. But it is not sufficient for customer engagement.' (p. 262). It is anticipated that if users interact more with MIM apps over time, that their engagement towards these apps will improve. Therefore, this study also investigated whether application usage moderates the association between customer engagement and the constructs of utilitarian, hedonic and social motivation.

This study's context is SA's telecommunications industry, which is characterised by fierce competition and high entry barriers, where customer loyalty is important to business growth and survival (Leckie *et al.*, 2016; MyBroadband, 2019). Over-the-top service providers (e.g., WeChat, WhatsApp) have been known to bypass the network of a traditional operator to deliver voice and data services over the Internet, without having the technology or business affiliation with operators to provide services (Mnakri, 2015), which impacts operator data revenue and data traffic. Consequently, it has become increasingly important for operators to engage with mobile subscribers better and build strong relationships that foster business growth.

From a theoretical perspective, the results from this research may explain the significance of gratifications obtained from using MIM applications, the key motivational factors impacting the customer engagement in the IM environment, and the impact on loyalty. From a managerial perspective, the findings may provide MIM service providers with a better understanding of the importance of prioritising motivational factors and ensuring customer engagement when building relationships with subscribers.

The paper starts with a literature overview of the theory supporting the study, including the motivational factors driving customers towards interacting with MIM apps, customer engagement and loyalty. Thereafter, the research model and hypotheses are presented. The key theoretical constructs and their definitions are outlined, and the interrelationships are explained. Then, the research methodology is outlined and the study's results are presented. The paper concludes by discussing the research findings, theoretical and managerial implications, and limitations, along with providing suggestions for future research.

Literature review

Uses and gratifications theory

Understanding the motives of customers' continued interaction using MIM apps can assist IM app providers to formulate better strategies to increase customer engagement. This research is grounded in the U&G theory, which is used by media investigations to determine the motivational factors for employing certain media (McQuail, 1983). The U&G theory can be employed to understand why and how customers employ certain media to satisfy needs (Klapper, 1963), with the core premise that users are engaged and continuously seek to fulfil needs, receiving satisfaction as these are satisfied (Khan, 2017). In U&G theory, a clear difference is made between gratifications obtained and sought (Ku *et al.*, 2013; Palmgreen *et al.*, 1980). Gratifications sought indicate fulfilment customers experience before utilising the

medium (e.g., technology, mobile application). Gratifications obtained refer to the fulfilment customers demand when using a certain medium. Moreover, the U&G theory states that gratifications obtained from a medium may differ from those sought (Palmgreen *et al.*, 1980; Quan-Haase and Young, 2010).

McQuail (1983) mentioned four arguments for using media: social interaction, information, entertainment, and personal identity. Katz *et al.* (1973) postulated 35 needs within the mass media, classified across five categories: personal integrative demands (e.g., status, credibility), social integrative demands (e.g., interactions with family and/or friends), affective demands (e.g., emotion, pleasure), cognitive demands (e.g., acquiring information, insight), and tension release demands (e.g., digression, escape). The U&G theory can explain the motives used in seeking content within social media and IM (Dolan *et al.*, 2019; Lo and Leung, 2009). This study follows a U&G approach to understand the specific gratifications customers obtain using MIM applications. Key motivational factors in the adoption and use of IM apps have been identified from extant research and assessed during this study to validate the findings of gratifications obtained in engaging with MIM apps.

Mobile engagement motivations

Recently, there have been several attempts to determine the specific gratifications and motives for MIM and social media use: Facebook (Banerjee and Dey, 2013; Cheung, Chiu *et al.*, 2011; Cvijikj and Michahelles, 2013; Dolan *et al.*, 2019; Karapanos *et al.*, 2016; Park *et al.*, 2009); Twitter (Chen, 2011; Liu *et al.*, 2010); WhatsApp (Church and de Oliveira, 2013; Karapanos *et al.*, 2016; Malik *et al.*, 2017; Shambare, 2014); MSN Messenger and Yahoo! Messenger (Ku *et al.*, 2013; Lo and Leung, 2009); and YouTube (Haridakis and Hanson, 2009; Khan, 2017). Table 1 presents a summary of the commonly used motivations used for interacting with mobile apps.

Table 1. Motivations in using mobile apps.

Mobile App	Motivations	Source
WhatsApp	Community, entertainment, perceived usefulness, pleasure, relatedness, sense of connection	Church and de Oliveira (2013), Karapanos et al. (2016), Malik *et al.* (2017), Shambare (2014)
Facebook	Entertainment value, information, rich in usefulness, social presence, relatedness, socialising	Banerjee and Dey (2013), Bitter *et al.* (2014), Cheung, Chiu *et al.* (2011), Cvijikj and Michahelles (2013), Dolan *et al.* (2019), Karapanos et al. (2016), Park *et al.* (2009)
Twitter	Process, content, need to connect with others, social	Chen (2011), Liu *et al.* (2010)
Youtube	Amusement, co-viewing, convenient entertainment, convenient information seeking, enjoyment, relaxing entertainment, seeking information, social interaction	Haridakis and Hanson (2009), Khan (2017), Malik *et al.* (2017)
MSN/Yahoo! Messenger	Social influence, sociability	Ku *et al.* (2013), Lo and Leung (2009), Malik *et al.* (2017)

Literature research has shown that there are several motivational factors identified in using MIM apps (such as WhatsApp) as shown in Table 1. These MIM motives fall within various types of motivational categories (discussed further in this section) and the aim of this research was to use U&G theory to identify the three most appropriate categories to group MIM motivations. The authors felt that there might still be several motivations not yet identified that impact customer engagement in using MIM apps, and this research focussed on examining the most common motivational categories influencing MIM engagement and customer loyalty.

Several attempts have been made in literature to categorise the motivations in using mobile apps. Bellman et al. (2011) provided two categories for branded mobile apps: experiential and informational. Experiential app content provides hedonic experiences through intrinsic enjoyment and entertainment, whereas informational app content provides functional or utilitarian experiences to achieve specific goals (Dovaliene *et al.*, 2016; Kim, Kim *et al.*, 2013). Hedonic motivations are related to activities where enjoyment and pleasure are offered, and utilitarian motivations are based on lifestyle decisions and functionality (Kim, Kim *et al.*, 2013). Sociability was also identified as a motive for customer engagement in apps (Dovaliene

et al., 2016; Kim, Kim *et al.*, 2013), and is concerned with the passion to connect and share content with other individuals or groups.

Malik *et al.* (2017) indicated that hedonic applications are mainly used by customers to partake in entertainment activities (e.g., Facebook, WhatsApp) and utilitarian apps are used for information seeking (e.g., online newspapers, mobile banking). Haridakis and Hanson (2009) investigated customers' YouTube motivations and concluded that videos were explored to pursue information and distributed for social interaction and enjoyment purposes. Ho and Syu (2010) have shown that mobile app users obtain the maximum enjoyment from 'relaxing and relieving stress' (p. 319). Park *et al.* (2009) examined the motivations in participating on Facebook using four factors: self-status seeking, entertainment, socialisation, and information seeking. Moreover, Leung (2001) indicated that the motivations for fashion, relaxation, affection, entertainment, inclusion, and sociability and escape were important in engaging with IM platforms. Similarly, Ku *et al.* (2013) examined six motivational factors used in an IM environment: information seeking, killing time, sociability, style, amusement, and relationship maintenance. Wu and Lu (2013) classified IM and social networking within a hedonic system-use context only, but indicated that systems (e.g., IM, social networking) can serve a dual purpose.

The type of app experience depends on its relevance and the context it is used in (Bellman *et al.*, 2011; Chang, 2015; Khan, 2017). Calder *et al.* (2009) indicated that a customer's experience with a service might not be mutually exclusive and could be a combination of multiple experiences. For example, some mobile apps can be engaging because they are fun and enjoyable, other apps can be appealing since they grant utilitarian experiences, while some apps can provide both experiences. This research used U&G theory to develop a categorisation of the motivational factors impacting customer engagement in using MIM apps, organised according to three categories: hedonic, utilitarian, and sociability. The broadly

classified motivations impacting engagement on MIM are aligned with the views of Dovaliene *et al.* (2016) and Marino and Lo Presti (2018).

Customer engagement

Customer engagement has been studied extensively over diverse areas in marketing literature, including psychology (Achterberg *et al.*, 2003; Bryson and Hand, 2007), organisational behaviour (Kahn, 1990), and sociology (Jennings and Stoker, 2004). Based on relationship marketing, customer engagement is characterised as a multifaceted construct and has been shown to influence value, word of mouth, involvement, trust, satisfaction, and loyalty (Bowden, 2009; Hollebeek, 2011; Islam and Rahman, 2016; Leckie *et al.*, 2016; Van Doorn *et al.*, 2010; Vivek *et al.*, 2012). From the literature, it is agreed that customer engagement may be treated as a three-dimensional notion. The customer engagement dimensions considered in this study are cognitive, emotional, and behavioural (Hollebeek *et al.*, 2014; Marino and Lo Presti, 2018). The customer engagement dimension of cognition is a state of mind concerned with an individual's perception of an object (e.g., product, brand). The emotional dimension is associated with satisfaction and a positive sensation, both related to the special feelings an individual has towards the object. The behavioural dimension entails the expression of an individual's intention towards an object through interaction and participation. Marino and Lo Presti (2018) define engagement as 'a behaviour that goes beyond purchase and is the level of the customer's interactions and connections with the brand, firms or activities often present in the MIM chat created around the brand/firm/activity' (p. 688), and this study adopts these views.

Recently, customer engagement has caused debate in social sciences, specifically social media engagement (Brodie *et al.*, 2013; Carlson *et al.*, 2019; Cheung *et al.*, 2011; Dolan *et al.*, 2019; Dovaliene *et al.*, 2016; Kim, Lin *et al.*, 2013; Thakur, 2016). Linkages between customer engagement, perceived satisfaction and value have been confirmed by Dovaliene *et al.* (2015),

who also found that the customer engagement dimension of cognition does not influence perceived value. Moreover, Islam and Rahman (2016) deduced that increased levels of involvement towards the brand generate stronger customer engagement on Facebook, resulting in word-of-mouth behaviour and trust.

Few attempts have been made to examine customer engagement in MIM. Tsai and Men (2018) found that privacy perception and social messenger dependency adequately impact engagement via WeChat and improve organisation-public affiliations. Deng *et al.* (2010) confirmed that trust, service quality, and perceived value contribute in generating satisfaction with MIM apps. Moreover, Oghuma *et al.* (2016) concluded that the constant intent to use MIM apps is impacted by service quality and perceived usability. The customer engagement facet of affection influences attitude and satisfaction in continuing using MIM apps with an organisation (Marino and Lo Presti, 2018). Marino and Lo Presti (2019) concluded that MIM apps can contribute to customer care when used as support to relationships with customers, and that the distance between customers and organisations can be decreased by creating personalised experiences via these apps.

Customer loyalty

Customer loyalty was addressed in numerous studies and is commonly viewed as behavioural and attitudinal (Leckie *et al.*, 2016). Jacoby and Chestnut (1978) delineated loyalty to a brand as 'the biased (i.e. nonrandom) behavioural response (i.e. purchase) expressed over time by some decision-making unit with respect to one or more alternative brands out of a set of such brands and is a function of psychological (decision-making) evaluative processes' (p. 80). For service organisations, brand loyalty is affected by customer engagement and impacts firm revenues (Dwivedi, 2015). Concerning engagement with customers, Vivek *et al.* (2012) posited that more positive attitudes linked to the engagement with a company, brand, or product can be developed by an engaged customer, which may enable loyalty. Regarding the cellular industry,

Leckie *et al.* (2016) concluded that the affection and activation dimensions of customer engagement strongly influenced brand loyalty.

In the customer engagement framework proposed by Bowden (2009), satisfaction, trust, involvement, delight and commitment were seen as precursors to achieving loyalty. Customer satisfaction's aim is loyalty (Sivadas and Baker-Prewitt, 2000). ~~Relating to MIM,~~ Deng *et al.* (2010) posited that satisfied customers will use an IM platform more than those dissatisfied. Brodie *et al.* (2013) added that customer engagement contributes to loyalty, satisfaction, connection, emotional bonding, trust, empowerment and commitment. Consequently, this study follows attitudinal manifestations of loyalty that entail focusing on the customer's brand commitment and the objective to continue purchasing the brand (Leckie *et al.*, 2016; Russell-Bennett *et al.*, 2007).

Conceptual model

Instant messaging motivations and customer engagement

Studies have confirmed the relationship between motivational factors (i.e., utilitarian, hedonic, sociability) and customer engagement (Cvijikj and Michahelles, 2013; Bitter *et al.*, 2014; De Vries *et al.*, 2012; Dolan et al., 2016; Dovaliene *et al.*, 2016; Fernandes and Remelhe, 2016; Khan, 2017; Leung, 2001). Cvijikj and Michahelles (2013) has shown that providing informative and entertaining content significantly increased customer engagement within a social media environment. Moreover, Higgins and Scholer (2009) indicated that the anticipated pleasure from a specific activity and associated expectations thereof can lead to improved engagement levels. Furthermore, Brodie et al. (2013) and Dolan et al. (2016) have investigated social interactions within the context of online platforms. Dolan et al. (2016) argued that users will engage more in human-to-human interaction in an online context if the motivation for social interaction is high, with Ko et al. (2005) reaching the same conclusion for social

interaction on the Internet. Bitter et al. (2014) has also concluded that a user's interaction behaviour with friends significantly affects customer engagement in the social media space. Lastly, Dovaliene *et al.* (2016) proved that utilitarian and sociability motivations influence customer engagement in mobile apps. As far as the authors could determine, the impact motivational factors (i.e., utilitarian, hedonic, social) have on customer engagement in an IM context like WhatsApp has not been investigated. Therefore, the following hypothesis is presented concerning the interrelationships between customer engagement and motivations in using MIM:

> **H1:** Utilitarian, hedonic and social motivation positively affect customer engagement in using MIM applications.

Based on **H1**, the following sub-hypotheses are formulated:

> **H1a:** Utilitarian motivation positively affects customer engagement in using MIM applications.
> **H1b:** Hedonic motivation positively affects customer engagement in using MIM applications.
> **H1c:** Social motivation positively affects customer engagement in using MIM applications.

Customer engagement and customer loyalty

Literature has focused on the association between customer engagement and loyalty (Banyte *et al.*, 2014; Bowden, 2009; Brodie *et al.*, 2013; Dessart, 2017; Hollebeek, 2011; Leckie *et al.*, 2016; Thakur, 2016; Vivek *et al.*, 2012). Bowden et al. (2009) argued that elevated levels of customer engagement is expected to enhance customer loyalty. Vivek *et al.* (2012) posited that customer engagement is fundamentally associated with the individuals' loyalty towards a brand. Brodie *et al.* (2013) concluded that 'consumer engagement enhances loyalty and satisfaction, empowerment, connection, emotional bonding, trust and commitment' (p. 112).

Furthermore, Banyte *et al.* (2014) has identified a significant relationship between engagement into value creation and attitude loyalty within the health care sector. Dessart (2017) indicated that brand relationships are significantly influenced by high levels of customer engagement that affects trust, commitment and loyalty within a social media environment. Leckie *et al.* (2016) concluded that customer loyalty can be influenced by the behavioural and emotional dimensions of engagement in the telecommunications industry. Moreover, Thakur (2016) showed that customer engagement can significantly predict loyalty in mobile apps. Therefore, the following hypothesis is presented concerning the relationship between customer engagement in using MIM and customer loyalty:

> **H2:** Customer engagement positively affects customer loyalty in using MIM applications.

Moderating effect of application usage

The impact of application usage was investigated concerning mobile applications (Deng *et al.*, 2010; Dinner *et al.*, 2015; Kim *et al.*, 2007; Kim *et al.*, 2016; Lo and Leung, 2009; Luo, 2002; Rodgers *et al.*, 2005; Venkatesh *et al.*, 2012). Luo (2002) investigated the effects of entertainment and informativeness on several online consumer behaviours (such as web usage) and found that consumers spend more time browsing the web for information or fun if they exhibit a positive attitude towards the system. Lo and Leung (2009) investigated IM usage and concluded that 'frequent IM users were those who felt that IM improved their social relationships' (p. 163). Furthermore, Kim et al. (2007) found that the feeling factor (pleasure) and the thinking factor (usefulness) had a significant positive relationship with continuance intention in using information systems. The authors also stated that 'consumer choice and usage behaviour are based on cognition and affective responses to a stimulus or experience' (p.522).

Within the context of the Internet, Ko *et al.* (2005) concluded that two usage motivations (i.e. information and social interaction) had a significant positive relationship on the amount of time spent on a website. Venkatesh *et al.* (2012) indicated that the association between behavioural intention and hedonic motivation within an information technology context was moderated by experience, age, and gender. Kim *et al.* (2016) investigated usage experience and relationship length in the smartphone market and found that customers favour greater commitment towards a product or company if the product is used more by the customer over time (Kim *et al.*, 2016). Lastly, Dinner et al. (2015) examined drivers of mobile app usage and found that 'app usage strongly enhances the probability the consumer purchases from the firm' (p. 28). Research suggests that application usage is likely to strengthen the association between motivational factors and customer engagement. Therefore, it is hypothesised that MIM application usage moderates the association between motivational factors and customer engagement:

> **H3:** Application usage positively moderates the relationships between motivational factors (utilitarian, hedonic, social) and customer engagement in using MIM applications.

Based on **H3**, the following sub-hypotheses are formulated:

> **H3a:** Application usage positively moderates the relationship between utilitarian motivation and customer engagement in using MIM applications.
>
> **H3b:** Application usage positively moderates the relationship between hedonic motivation and customer engagement in using MIM applications.
>
> **H3c:** Application usage positively moderates the relationship between social motivation and customer engagement in using MIM applications.

Figure 1 outlines the proposed research model for this study. This model illustrates the impact of utilitarian, hedonic and social motivation on customer engagement, the impact of customer engagement on customer loyalty, and the moderating effect of application usage on the association between IM motivational factors and customer engagement.

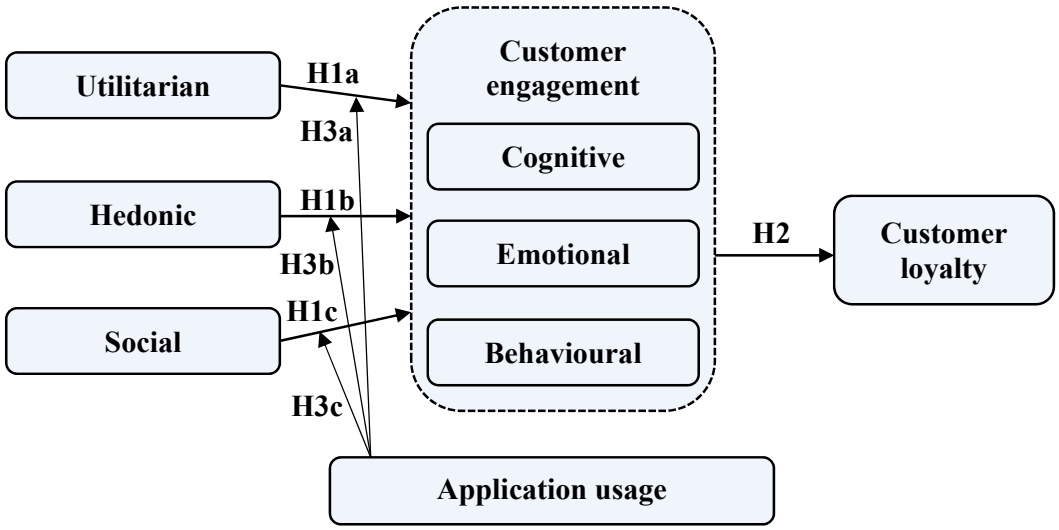

Figure 1. Proposed research model.

Research methodology

Research setting and respondents

This study is quantitative in nature and a descripto-explanatory research design was followed. The target population was all mobile subscribers (pre-paid and post-paid) of smartphones, tablets or smart devices within SA. The study considered these devices to have the same functionality since they tend to use popular operating systems (e.g., iOS, macOS, Android, Windows) and apps downloaded are often obtained from the same markets (Harris *et al.*, 2016). Considering the structural equation modelling (SEM) guidelines (Hair *et al.*, 2014; Jackson, 2003), the proposed sample size was deemed adequate. Purposive sampling was used to obtain responses through an online survey. The unit of analysis was an individual using a smart device (e.g., smartphones, tablets) to interface with an MIM application. For this study, WhatsApp was chosen as the MIM platform under investigation, since most mobile app users in SA use this social messaging platform (Statista, 2020b). The focus was on adult subscribers over 18 years old (Statista, 2019), although subscribers who owned more than one device could also

participate. A further restriction was that smart device subscribers use at least one MIM application to communicate (with friends, family and/or colleagues).

Measures

An anonymous, structured, self-administered online survey was utilised to investigate the association between motivational factors, customer engagement and loyalty in a WhatsApp environment. Measurement scales from previous research were used and aligned with this study's perspectives. The survey consisted of two screening questions and five sections in total. The screening questions determined if respondents met the minimum criteria to partake in the survey – namely, WhatsApp users and SA residents. The first section of the survey focused on demographic information about MIM subscribers in SA, such as age, education, gender, home language and employment status. The second section requested information relating to patronage habits of WhatsApp respondents, such as the time spent using the application as well as the device used to interact with the application. The last three sections of the survey comprised 26 items to measure the motivational factors impacting customer engagement, in addition to questions on customer engagement and loyalty. Seven-point unlabelled Likert-type scales, ranging from 1 'strongly disagree/not at all important' to 7 'strongly agree/extremely important', measured the constructs. Items measuring utilitarian, hedonic and social motivation were adapted from Kim, Kim *et al.* (2013). Customer engagement was evaluated using a measurement scale used by Cheung, Lee *et al.* (2011) to measure the construct across three dimensions – cognitive, emotional, and behavioural. Lastly, a measurement scale with four items from Leckie *et al.* (2016) evaluated customer loyalty. Table 2 illustrates the adapted items employed to evaluate the constructs, including the sources of the measurement scales.

Table 2. Construct measuring.

Factor	Item	Source
Utilitarian	To keep me informed and updated using WhatsApp (UT1).	Kim, Kim *et al.* (2013)
	To increase my skills and knowledge using WhatsApp (UT2).	
	To keep me organised – e.g., checking messages and voice notes (UT3).	
	WhatsApp offers a variety of ways to communicate with others – e.g., texting, voice/video calling (UT4).	
Hedonic	To get rest and relaxation using WhatsApp (HE1).	
	To enjoy the variety of contents (e.g., texting, voice/video calling, group chats, voice notes, sharing pictures and videos) that WhatsApp offers (HE2).	
	To enjoy what I like about using technology (HE3).	
Social	To keep in touch/share events with friends and family (SO1).	
	To be connected and meet other people with similar interests (SO2).	
	To tell my friends and family about what I learnt/read/heard using WhatsApp (SO3).	
Cognitive	Using WhatsApp is so absorbing that I forget about everything else (CO1).	Cheung, Lee *et al.* (2011)
	I am rarely distracted when using WhatsApp (CO2).	
	My mind is focused when using WhatsApp (CO3).	
	I pay a lot of attention to WhatsApp (CO4).	
Emotional	I am enthusiastic about using WhatsApp (EM1).	
	I am excited when using WhatsApp (EM2).	
	I am interested in using WhatsApp (EM3).	
	I am proud of using WhatsApp (EM4).	
Behavioural	I feel strong and vigorous when using WhatsApp (BH1).	
	I feel very resilient, mentally, as far as WhatsApp is concerned (BH2).	
	I devote a lot of energy to WhatsApp (BH3).	
	I try my hardest to perform well when using WhatsApp (BH4).	
Customer loyalty	In the future, I will be loyal to WhatsApp (CL1).	Leckie *et al.* (2016)
	I will use WhatsApp again (CL2).	
	WhatsApp will be my first choice in the future (CL3).	
	I will not use other brands if WhatsApp is available (CL4).	

Data collection procedures

The panel from a reputable market research provider in SA collected data from survey respondents and acted as the sampling frame for this study. Before the official survey was distributed, a pilot study was conducted amongst 61 respondents to test the survey. Basic data screening tests were applied using pilot results, which included addressing missing data and

outliers, and investigating normality, linearity and reliability of the dataset (Tabachnick and Fidell, 2013). The pilot study produced sufficient results confirming that no updates to the measurement scale were necessary. Once the pilot study was completed, the market research provider emailed the requests to partake in the official online self-administered survey. The survey was distributed to 17 480 panel members.

Data screening tests were performed and responses were removed due to respondents identified as being unengaged. No multicollinearity issues were identified for the constructs in this study, since the collinearity tolerance for all variables in the model was greater than 0.1, and the variable inflation factors were below 5.0 (O'Brien, 2007). The associations amongst motivational factors and customer engagement dimensions were homoscedastic, except for the association amongst utilitarian motivation and the emotional dimension of customer engagement, which leant towards being heteroscedastic.

Considering Kline's (2011) guidelines, the skewness and kurtosis values obtained were assessed to check if they were between -2 and +2, which would indicate that normality of distribution was obtained concerning every variable item. Multivariate outliers were addressed by comparing the Mahalanobis distance of independent variables to a Chi-square (χ^2) distribution with the same degrees of freedom (Tabachnick and Fidell, 2013). Finally, 282 usable responses (n) were included in the analysis.

Table 3 presents the descriptive statistics of the valid sample. Respondents were on average 50 years old, with a standard deviation of 13.92 years. Of the respondents, 55% were male, 83% were 36 years and older, 47% were English-speaking, 34% had a university degree, and 97% accessed WhatsApp via smartphone. Most of the respondents were employed full-time by an organisation, engaged with WhatsApp less than three hours a day, and had used the app for more than three years.

Table 3. Descriptive characteristics (n = 282).

Variable		Frequency	Percentage
Gender	Male	155	54.97%
	Female	124	43.97%
	Prefer not to say	3	1.06%
Age	18–24 years	5	1.77%
	25–35 years	43	15.25%
	36 years and older	234	82.98%
Language	English	132	46.81%
	Afrikaans	92	32.62%
	isiZulu	15	5.32%
	isiXhosa	12	4.26%
	Other	31	10.99%
Education	High school	7	2.48%
	National Senior Certificate	47	16.67%
	Diploma	83	29.43%
	University degree (bachelor's or honours)	96	34.04%
	Postgraduate degree (master's or doctorate)	49	17.38%
Employment status	Full-time employed by an organisation	171	60.64%
	Part-time employed by an organisation	11	3.90%
	Self-employed	49	17.38%
	Full-time student	3	1.06%
	Housewife or househusband	1	0.35%
	Retired	43	15.25%
	Unemployed	3	1.06%
	Other	1	0.35%
Smart device	Smartphone	273	96.81%
	Laptop	5	1.77%
	Tablet	4	1.42%
Average daily WhatsApp participation	Less than 3 hours	198	70.21%
	3–24 hours	84	29.79%
Duration of WhatsApp participation	Less than 3 years	14	4.96%
	3–6 years	143	50.71%
	More than 6 years	125	44.33%

Data analysis and results

SEM consisted of two parts (Hair *et al.*, 2014): (1) developing the measurement model that shows the associations between independent and dependent latent variables, and evaluated by calculating construct validity, composite reliability (CR) and the model fit indices; and (2) developing the structural model that shows the causal associations between latent variables, and evaluated by calculating the model fit indices. To test the study's hypotheses, data were

analysed using SPSS 25.0, AMOS 25.0 and the Hayes (2013) PROCESS macro for moderation analysis in SPSS. The Hayes (2013) PROCESS macro within SPSS is a regression-based technique to statistical testing, which was used in this study for path-based moderation analysis to assess the moderating impact of MIM application usage on the relationship between motivational factors and customer engagement. The Hayes (2013) statistical technique enabled the estimation of a model with moderation of a predictor variable *X* (i.e. utilitarian, hedonic or social motivation) on an outcome variable *Y* (i.e. customer engagement) by a moderator variable *M* (i.e. application usage). The Hayes (2013) PROCESS macro was used to estimate model coefficients, confidence intervals, *t* and *p*-values, and standard errors using maximum likelihood logistics regression and ordinary least squares regression.

Tests of measurement model

Confirmatory factor analysis (CFA) assessed the construct validity, including the standardised factor loadings (SFLs), convergent validity, discriminant validity, and average variance extracted (AVE). The subsequent results suggested moderate model fit: $\chi^2 = 908.341$, $\chi^2/df = 3.176$, goodness-of-fit index (GFI) = 0.771, adjusted goodness-of-fit index (AGFI) = 0.720, comparative fit index (CFI) = 0.890, normed fit index (NFI) = 0.849, non-normed fit index (NNFI) = 0.875, incremental fit index (IFI) = 0.891, standardised root mean square residual (SRMR) = 0.062, and root mean square error of approximation (RMSEA) = 0.088. Discriminant validity could not be obtained. Therefore, based on the model fit results, the following items were removed while aiming to retain the theoretical integrity of the constructs: UT2, UT4, HE1, SO1, CO1, and EM4. An exploratory factor analysis has shown that seven distinct constructs could be identified in a pattern matrix if these items were removed. Furthermore, the reliability of the measurement scales also improved, resulting in Cronbach's alpha coefficients exhibiting higher values. The results for the reduced measurement model suggested good model fit: $\chi^2 = 436.526$, $\chi^2/df = 2.780$, GFI = 0.865, AGFI = 0.820, CFI = 0.935, NFI = 0.903, NNFI = 0.922,

IFI = 0.936, SRMR = 0.044, and RMSEA = 0.080. Table 4 depicts the SFLs for each item, AVE, CR and Cronbach's alpha scores.

Table 4. Factor loadings, average variance extracted, composite reliability, and Cronbach's alpha.

Constructs	Item	Factor loading	AVE	CR	Cronbach's alpha
Utilitarian	UT1	0.73	0.631	0.772	0.767
	UT3	0.86			
Hedonic	HE2	0.78	0.701	0.824	0.819
	HE3	0.89			
Social	SO2	0.85	0.708	0.829	0.829
	SO3	0.84			
Cognitive	CO2	0.50	0.555	0.781	0.768
	CO3	0.63			
	CO4	0.89			
Emotional	EM1	0.89	0.793	0.920	0.921
	EM2	0.92			
	EM3	0.86			
Behavioural	BH1	0.88	0.761	0.927	0.927
	BH2	0.88			
	BH3	0.87			
	BH4	0.86			
Customer loyalty	CL1	0.81	0.627	0.869	0.861
	CL2	0.70			
	CL3	0.90			
	CL4	0.74			

Note: All significant at the 0.001 level.

The measurement scales were reliable, with Cronbach's alpha coefficients exceeding 0.70, ranging between 0.767 and 0.927 (Kline, 2011). The CR estimates were greater than 0.70 and supported the internal consistency of the constructs (Bagozzi and Yi, 1988). Therefore, construct reliability was obtained as the Cronbach's alpha and CR estimates exceeded the recommended thresholds. Convergent validity was established as the AVE for each latent factor exceeded 0.50 (Fornell and Larcker, 1981; Hair *et al.*, 2014).

Discriminant validity was achieved and assessed using three approaches. First, the AVE values for all the latent variables were compared with their corresponding maximum shared variances (Petzer and Van Tonder, 2018). Second, inter-variable correlations were significantly less than 1 at $p = 0.001$ (Bagozzi and Yi, 1988). Third, the square root of every variable's AVE was greater than the correlation coefficients with other variables. Table 5 presents the mean,

standard deviation, AVE, and discriminant validity results of the key constructs for this study. Common method bias (CMB) was also assessed, as the study collected data via an online survey. A Harman single-factor test (with an unrotated factor solution) was executed by constraining the number of factors extracted via a factor analysis to just one (Podsakoff and Organ, 1986). The total variance from a single factor extracted was 46.95%. If one factor accounted for a total variance of 50%, then this can be considered an indication of CMB, but the result obtained from this study indicates that CMB is not a serious problem.

Table 5. Means, standard deviations, average variance extracted, and construct correlations with square root of average variance extracted.

Construct	Mean	Standard deviation	AVE	UT	HE	SO	CE	CL
Utilitarian	5.099	1.377	0.631	**0.794**				
Hedonic	4.832	1.581	0.701	0.781***	**0.838**			
Social	4.328	1.746	0.708	0.727***	0.769***	**0.842**		
Customer engagement	3.783	1.247	0.830	0.718***	0.748***	0.684***	**0.911**	
Customer loyalty	4.795	1.312	0.627	0.484***	0.516***	0.438***	0.714***	**0.792**

***Significant at the 0.001 level; all correlations significantly less than 1; n = 282. The square root of the AVE for every construct presented within the correlation matrix in bold on the diagonal.

Lastly, measurement model invariance was assessed during the CFA to validate that factor loadings and structure were sufficiently equivalent across male and female groups. Configural invariance was obtained as evidenced by good model fit measures when estimating the two gender groups freely without constraints (Vandenberg and Lance, 2000), resulting in χ^2/df = 1.995, GFI = 0.823, CFI = 0.927, SRMR = 0.045, and RMSEA = 0.060. Metric invariance was obtained as demonstrated by a non-significant Chi-square difference test result (p = 0.205) between the unconstrained and full-constrained models. The non-significant test result (p = 0.292) retrieved from a multi-group analysis (considering male and female groups) performed in AMOS indicates that scalar invariance was achieved.

Structural model

The structural relationships between the motivational factors, customer engagement and customer loyalty were examined using SEM. The results for the structural model suggested good model fit: $\chi^2 = 437.965$; $\chi^2/df = 2.737$; GFI = 0.865; AGFI = 0.822; CFI = 0.936; NFI = 0.903; NNFI = 0.923; IFI = 0.936; SRMR = 0.044; RMSEA = 0.079. Although the GFI is slightly below the recommended value of 0.90, the remaining fit indices were within acceptable ranges (Bagozzi and Yi, 1988; Hair *et al.*, 2014). The results of the hypothesis testing are shown in Table 6 and Figure 2.

Table 6. Results of hypotheses tested.

Hypothesis	Path	Standardised coefficient	Standard error	*t*-value	Conclusion
H1a	UT–CE	0.286*	0.125	2.702	Supported
H1b	HE–CE	0.390**	0.113	3.435	Supported
H1c	SO–CE	0.172	0.076	1.798	Not supported
H2	CE–CL	0.710**	0.069	10.651	Supported

Note: Significant at: $^{*}p < 0.01$, $^{**}p < 0.001$.

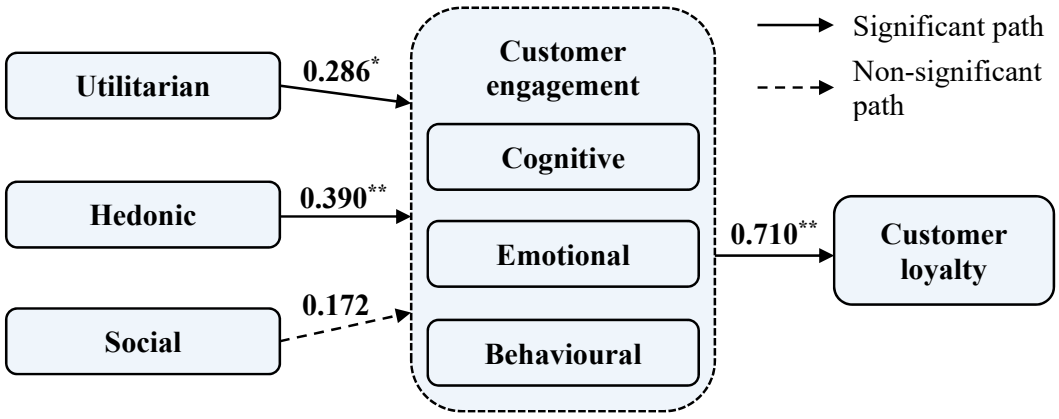

Figure 2. The results of structural model.
(Note: Significant at: $^{*}p < 0.01$, $^{**}p < 0.001$.)

The structural model indicates that utilitarian and hedonic motivation have a significant positive effect on customer engagement (with coefficients of 0.286* and 0.390**, respectively), but social motivation was found to have no significant effect on customer engagement (coefficient

of 0.172). Customer engagement also had a significant positive effect on customer loyalty (coefficient of 0.710**). Therefore, H1 was not supported, and H2 was supported.

Moderation analysis

The moderating effects of application usage on the association amongst all the motivational factors and customer engagement were assessed. In this study, application usage was defined as the average number of hours a survey respondent spent using WhatsApp daily. Respondents were classified into three groups considering the average hours (3.01 hours) of application usage daily.

Low app usage respondents (n = 97) were those who used WhatsApp for up to one hour each day, medium app usage respondents (n = 101) used the app between one and three hours each day, and high app usage respondents (n = 84) used the app for more than three hours a day. Using the Hayes (2013) macro within SPSS, bootstrapping was executed using 5 000 resamples and a 95% confidence interval.

Table 7 lists the results of the moderation analysis. The p-value of the interaction between moderator (i.e. application usage) and independent variable (i.e. utilitarian, hedonic or social motivation) was calculated to determine the significance (when $p < 0.05$) of the moderating effects. The t-value and path coefficient of the interaction between independent variables and customer engagement are listed in Table 7 for each hypothesis across each application usage group. Medium app usage has a compelling positive impact on the associations between customer engagement and utilitarian (path coefficient of 0.452**) and hedonic motivation (path coefficient of 0.424**). However, low and high app usage had no significant effect on the association between motivational factors and customer engagement. H3a and H3b were partially supported, because only medium app usage moderated relationships between customer engagement and utilitarian and hedonic motivation. Since low, medium and high application usage had no impact on the relationship between customer

engagement and social motivation, H3c was not supported. Subsequently, H3 was not supported in this study.

Table 7. Results of moderating effects.

H	Path	Low app usage (n = 97)			Medium app usage (n = 101)			High app usage (n = 84)		
		C	t	Result	C	t	Result	C	t	Result
H3a	UT–CE	0.460	5.699	X	0.452**	7.233	O	0.506	4.991	X
H3b	HE–CE	0.403	6.287	X	0.424**	7.859	O	0.570	7.142	X
H3c	SO–CE	0.351	6.249	X	0.403	7.102	X	0.371	5.608	X

Note: Significant at: $^{**}p < 0.001$;

H: Hypothesis; C: Coefficient; O: Supported; X: Not Supported.

Discussion

This study investigated the impact of motivational factors on customer engagement for existing subscribers working with MIM apps in SA, and the association amongst customer engagement and loyalty. Furthermore, the moderating effect of app usage on the association between motivational factors and customer engagement was assessed.

First, the study assessed whether utilitarian, hedonic and social motivation factors affect customer engagement. Utilitarian and hedonic motivation were found to significantly affect customer engagement, thus the hypotheses were supported. This finding is consistent with earlier IM adoption studies, which concluded that amusement and information seeking were important gratifications in using these messaging applications (Ku *et al.*, 2013; Quan-Haase and Young, 2010). Hedonic motivation had the strongest effect on customer engagement in this study. This implies that this study's demographic considered fun and excitement the most important factor to consider when engaging with WhatsApp. Interestingly, Dovaliene *et al.* (2016) concluded that hedonic motivation in using mobile apps had no significant relationship with customer engagement. In this study, social motivation had no significant effect on customer engagement and this hypothesis was rejected. This implies that most respondents were not technologically determined to share or socially interact with other people using MIM

through moments and events. This finding was consistent with Deng *et al.* (2010), who found that social value was not an important gratification during the adoption phase of MIM, but contradicts the findings of Ku *et al.* (2013) and Leung (2001). Moreover, Dovaliene *et al.* (2016) concluded that customer sociability was a critical factor when considering customer engagement in mobile apps. A possible explanation for this result is that the type of mobile app experience depends on its relevance and the context within it is used (Bellman *et al.*, 2011; Chang, 2015). In this study, the SA respondents engaging with MIM were on average 50 years old – much higher than the respondents in the research of Dovaliene *et al.* (2016) – thus, it could be that these older respondents do not engage with WhatsApp like the younger generation does.

Second, the study assessed whether customer engagement affects customer loyalty. Customer engagement was found to significantly affect customer loyalty in an MIM setting, thus supporting the hypothesis. This finding corroborates other research (Brodie *et al.*, 2013; Dessart, 2017; Leckie *et al.*, 2016; Thakur, 2016; Vivek *et al.*, 2012). The results imply that the higher the customer engagement, the greater the customers' prospect to be loyal towards WhatsApp and encourage other users to work with the app. This study's findings indicate that MIM service providers should focus on enhancing utilitarian and hedonic features of apps to improve customer engagement, which could result in more loyalty from customers over time.

Third, it was hypothesised that application usage has a moderating effect on the associations between motivational factors and customer engagement. Low and high app usage had no significant effect on the associations, but medium app usage had a significant effect on the association between customer engagement and utilitarian and hedonic motivation. The results indicate that higher application usage does not strengthen the relationships between motivational factors and customer engagement. Subsequently, hypotheses H3a and H3b were partially supported, and H3c was not supported. Despite medium application usage defined as

using WhatsApp for more than one hour and up to three hours each day, the findings of this moderating effect can be compared to those of Ko et al. (2005), who concluded that motivations in using the Internet (i.e. information, convenience and social interaction) have a significant effect on a user's time spent at a website. Luo (2002) shared similar views stating that online consumers spend more time browsing the web for information or fun. This study's findings imply that when customers are engaged with MIM for short or long periods, they will continue to use MIM, but that an adequate amount of time spent using MIM for entertainment or convenience can enhance customer engagement. The results from this study are significant, as previous research has not provided a comprehensive account of the moderating effect of MIM application usage on the association between motivational factors and customer engagement. Therefore, the findings provide new insight into the impact of app usage on the connection between motivational factors and customer engagement towards using WhatsApp, as well as its contribution towards customer loyalty.

Implications and limitations

Theoretical implications

Findings from this research contribute to the underexplored notion of customer engagement and motivational factors in the MIM environment. A conceptual model was developed and empirically tested to address this research gap. This research has highlighted the importance of utilitarian and hedonic motivations affecting customer engagement in using WhatsApp, and the contribution to customer loyalty. Extant research has focused primarily on the motivational factors impacting social media use (Banerjee and Dey, 2013; Chen, 2011; Liu *et al.*, 2010), with little investigation into the impact of motivational factors on MIM apps (Karapanos *et al.*, 2016; Ku *et al.*, 2013; Shambare, 2014). Empirical findings indicate that customer engagement in using MIM can be strengthened by focusing on utilitarian and hedonic motivations, however,

Dovaliene *et al.* (2016) concluded that only utilitarian and sociability motivations in using mobile apps had significant relationships with customer engagement. In this study, the social motivation and gratification in continuously using MIM apps have been found to have no impact on customer engagement, although extant studies have shown that this factor does impact customers' adoption of MIM (Ku *et al.*, 2013; Leung, 2001). This implies that customers are socially motivated differently when using an MIM app for the first time, compared to when they continue to use the app. Furthermore, the findings demonstrate that higher levels of customer engagement can strengthen customer loyalty, which is aligned with extant studies (Deng *et al.*, 2010; Leckie *et al.*, 2016; Brodie et al., 2013; Thakur, 2016). Moreover, the moderating effect of medium application usage has been shown to impact the association between customer engagement and utilitarian and hedonic motivation. This implies that the right amount of MIM application usage based on enjoyment or lifestyle decisions can strengthen customer engagement.

Managerial implications

The study provides several managerial implications. First, service providers should enhance customer engagement by focusing on utilitarian and hedonic motivations through the implementation of marketing strategies that ensure MIM apps satisfy functional needs, and provide convenience and entertainment. From the study's conceptual model, customer loyalty can be cultivated if the motivational factors and customer engagement are well managed. Therefore, service providers need to consider designing MIM apps or add features (e.g., rewards) to existing apps that focus on the motivational factors contributing to improving customer engagement. This study's findings can assist MIM service providers in monetising their apps better in the future by developing business models that align with the needs of their customers (Tang, 2016).

Second, service providers should consider improving customer engagement amongst older people by not socially interacting with customers via the MIM app, since social motivation has been shown to have no effect on customer engagement. Hence, MIM providers should exercise caution in improving customer engagement when targeting older generations by rather focusing on the factors that will strengthen loyalty.

Finally, service providers should consider the time customers spend on MIM apps, since this study has shown that only medium app usage impacted on the association between customer engagement and utilitarian and hedonic motivation. Too little or too much MIM usage will not improve customer engagement. However, the opportunity exists for service providers to optimise customer engagement in an MIM environment – e.g., by keeping track of usage activity and by identifying customers who need to use an app more by targeting their utilitarian and hedonic needs through sophisticated marketing campaigns. Such campaigns could include using advertising or reward programs to encourage customers to use an app. Kim *et al.* (2015) has shown that customer relationship management can be an effective tool to enhance customer engagement for mobile users. Gathering more information from app users on how they interact with apps, allows a firm to understand users much better. Kim, Lin *et al.* (2013) found that by adding animation and graphics to mobile apps is effective in advertising product brands. Dinner *et al.* (2015) found that app design is an important factor to consider that influences usage. Lastly, Lo and Leung (2009) indicated that the emoticon feature within apps can be used to enhance user enjoyment and 'understanding when contextual information is lacking' (p. 157).

Limitations and future research

Despite this research's input, a few limitations present opportunities for future research. First, the data collection period was cross-sectional in nature for this study, and the data only provided a snapshot of customer engagement with MIM apps at a specific point in time. Customers'

intentions and perceptions change based on their history and interactions with MIM apps. A longitudinal study approach could be undertaken to overcome this limitation.

Second, this study developed a conceptual model to examine the interrelationships between motivational factors, customer engagement and loyalty in SA's MIM environment. Therefore, researchers should exercise discretion when the findings are cited, since there might be differences between SA and other countries. Further studies could consider countries of similar culture to replicate and validate the findings of this and extant studies.

Third, this research focused on a limited number of motivational factors impacting customer engagement, and one moderator to investigate the influence on the association between motivational factors and customer engagement. Future studies could consider more complex relationships with customer engagement in using MIM apps. Additional motivational factors that can be further investigated include switching cost and other user gratifications that might impact engagement with MIM apps. The study also focused on time MIM customers spent interacting with WhatsApp, but did not consider customer behaviour in the time spent making voice/video calls, sending text messages, and uploading pictures. Customers' behaviour in using an MIM app can impact at the customer engagement level towards using IM platforms, although this study assumed that customers, on average, spent the same time sending text messages, making voice/video calls and uploading pictures.

Fourth, in this study, the respondents' average age was 50, indicating that the research results reflected an older generation. The approach taken by an older generation of customers in engaging with WhatsApp is not necessarily the same as that of the younger generation. Further studies could focus more on the younger generation since a significant percentage of the WhatsApp population is aged 18–34 (Statista, 2019).

Fifth, the type of smart device can also impact the engagement level of a customer communicating using an MIM app. For example, smartphones with MIM apps but no

touchscreen can cause difficulty for customers to interact with the mobile app and lead to lower engagement levels. Since this study does not consider the smartphone type or quality used when interacting with MIM apps, consequent studies could examine the impact these aspects have on customer engagement.

Finally, since there is no clear consensus regarding customer engagement in mobile apps, a widely used measurement scale has not been found yet for this study. The collected research data might not be fully representative of the whole population, since purposive sampling was performed using an online survey. A larger sample size used during multivariate statistical analysis might lead to more accurate results.

Conclusions

This work has explored the relationships between motivational factors, customer engagement and loyalty for existing WhatsApp subscribers in SA, as well as the moderating effect of application usage. This study produced several contributions. First, by following a U&G approach, this research enriched the understanding of key motivational factors impacting customers' continued engagement towards using MIM, as opposed to the adoption thereof. Second, this study developed and validated a conceptual model to examine the relationship between constructs to further the understanding of the motivational factors impacting customer engagement in using MIM. As per the author's knowledge and based on the research conducted, this study is one of the earliest pursuits to examine different motivational factors impacting customer engagement and loyalty in an MIM environment. It was found that utilitarian and hedonic motivation, but not social motivation, impact customer engagement towards using MIM for existing customers, which implies that social motivations and gratifications in using IM differ during the adoption and continuous engagement phases. Third, the moderating effect of application usage between motivational factors and customer engagement was investigated,

providing useful insights for MIM providers to develop better marketing strategies to strengthen customer engagement and loyalty.

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