Fostering Financial Inclusion in a Developing Country:
Predicting User Acceptance of Mobile Wallets in Cameroon

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ABSTRACT

Financial inclusion is a vital development priority for countries worldwide. Mobile wallet (m-wallet) is considered as a disruptive payment method that will substitute the traditional physical wallet to achieve the so-called cashless society and enables financial inclusion. This study aims at developing and testing a research model that integrates a set of technology factors (perceived usefulness, perceived ease of use, fun to use, monetary value), external factors (peer influence and perceived status benefit), and cultural factors (humane orientation and societal collectivism) to assess the intention to adopt and use m-wallet, for financial inclusion, in a developing country. The proposed conceptual model is tested using data collected from 621 m-wallet users in Cameroon. The model explains 47.5% of the variance of the actual use of m-wallet and 32.90% of the variance of financial inclusion. Eight out of the 10 proposed hypotheses were supported. Finally, implications for research and practice are discussed.

KEYWORDS

Acceptance, Actual Use, Adoption, Cameroon, Cultural Factors, Financial Inclusion, Mobile Wallet, TAM

1. INTRODUCTION

Financial inclusion refers to the means by which "individuals and businesses have access to useful and affordable financial products and services that meet their needs – transactions, payments, savings, credit and insurance – delivered in a responsible and sustainable way" (p. 1) (The World Bank Group 2008). Financial inclusion is a vital development priority for countries worldwide (Varghese & Viswanathan, 2018; Omigie et al., 2020) as in improves the overall standard of living (Grant, 2019), reduces level of poverty (N'Dri & Kakinaka, 2020), and enables economic growth (Makina, 2017). Indeed, it facilitates the participation of people and businesses previously excluded from taking part in the financial sector to fully engage with this sector through access to a transaction account (Khan et al., 2017).

In this context, such an account will allow them to store money, send and receive payments, and make or benefit from other financial services (e.g., insurance, credit) (The World Bank Group, 2008).

Varghese and Viswanathan (2018) argued that "financial inclusion broadens the resource base of a formal financial system by cultivating a culture of savings among the underprivileged, thereby moving another step closer to the process of socio-economic development." (p. 2). This has been evidenced by prior studies, most of which have shown that financial inclusion helps households to manage better their financial resources (Singh et al., 2017; Fanta & Makina, 2019) and to invest more in education and health (The World Bank Group 2008; Fanta & Makina, 2019), improving their well-being and contributing to increasing potential future earnings (Fanta & Makina, 2019).

In this context, IT has been recognized as a critical enabler of financial inclusion (Mushtaq & Bruneau, 2019; Changchit et al., 2018). In addition, the mobile wallet (or m-wallet) has been a focus of attention as a disruptive and inclusive financial technology, mainly in developing economies (Shin, 2009; Shaw, 2014; Bailey et al., 2017; Madan & Yadav, 2016; Eappen, 2019; Singh & Sinha, 2020). M-wallet is an innovative online technological interface through which credit card, debit card or financial information can be easily transported in a digital form on a mobile device (Leong et al., 2020; Kiladze & Trichur, 2018, Zion Market Research, 2019; Alkhowaiter, 2020). In this vein, one of the most evident positive implications of the m-wallet resides in its ability to foster financial inclusion, especially in emerging economies (Singh & Sinha, 2020; Singh et al., 2020). Therefore, m-wallet is a powerful approach not only to include the poorest population in the financial and banking circuits, but also to reinforce the financial resources of retailers and merchants (Singh & Sinha, 2020). In other words, the key actors of the entrepreneurial sector see in m-wallet a tool that can drastically reduce the costs of their operations, thus enabling them to reduce the costs of their services to the poorest people.

While the adoption and use of m-wallet are gaining acceptance in many regions of the world, for example, in India (Singh et al., 2020), Malaysia (Leong et al., 2020), Canada (Shaw, 2014), Korea (Shin, 2009), Bangladesh (Amin et al., 2016), very few studies have been conducted to assess the key determinants of m-wallet adoption intention and use for financial inclusion in Africa, although Africa is considered as the continent with the lowest financial inclusion level in the world (Makina & Walle, 2019). This means that the m-wallet could be considered a critical enabler of financial inclusion in emerging economies, as it allows the less-favored population not to be "left behind"—these can henceforth access bank systems and other financial services (including not only saving part of their earnings and access to microcredits, but also make transactions by means of their mobile wallet). Moreover, m-wallet can empower microfinance institutions, give the opportunity to merchants and retailers to extend their client portfolio by easily reaching disadvantaged population groups in rural and urban areas (Singh & Sinha, 2020).

Against this background, this paper aims to contribute to the corresponding stream of research by investigating the key determinants of m-wallet adoption intention and use for financial inclusion. More precisely, this study seeks to answer the following research questions (RQ) *RQ1: What are the key factors that predict m-wallet intention to adopt? RQ2: Is m-wallet adoption suitable to leverage financial inclusion in Cameroon?* We follow the research call of Venkatesh et al. (2014) which is calling for more studies on individual-level technology adoption that goes beyond the simple adoption and use of IT, but rather develops a research model that predicts the intention to adopt and use m-wallet in order to enable financial inclusion.

Also, we integrated two cultural constructs into our proposed model as cultural issues have been considered a central topic in IT diffusion, adoption, and infusion (Chau, 2008; Srite et al., 2008). To address this research question, we review the extant literature on m-wallet and IT adoption and test the proposed research model with data collected from 621 active m-wallet users in Cameroon.

The rest of the paper is organized as follows. Section 2, we present the contextual issues on m-wallet, followed by the theoretical background on technology adoption literature in Section 3. Section 4 proposes the research model and hypotheses. In sequence, Section 5 is dedicated to the methodology design. Section 6 displays the results while Section 7 deals with the discussion. As

for Section 8, it presents the theoretical and practice implications, followed by the contributions in Section 9. Finally, Section 10 is dedicated to the conclusions of this work.

2. CONTEXTUAL ISSUES

The m-wallet is emerging as a key enabler of the so-called cashless society (Taheam et al., 2016), a society where consumers and merchants will depend on their mobile rathern than physical devices to conduct financial transactions (Sathye et al., 2017; Hawlk, 2019; Leong et al., 2020). Some scholars consider m-wallet a disruptive payment method that will ultimately substitute the traditional physical wallet (Leong et al., 2020). With the m-wallet, it is possible to make safe monetary transactions anytime and anywhere, and the types of transactions can be as diverse as consumer-to-consumer (C2C), consumer-to-machine (C2M), consumer-to-business (C2B), and consumer-to-online (C2O) (Leong et al., 2020). Some analysts even considered m-wallet as another form of electronic commerce model that depends on the use of mobile devices and thus offers more convenience and easier access to one's savings (Zion Market Research, 2019). Furthermore, m-wallet is also considered a real opportunity for unbanked and under-banked consumers to make use of mobile commerce (Allied Market Research, 2019).

In this regard, one of the main benefits for the m-wallet adopters is their potential to be integrated into the financial landscape (Singh & Sinha, 2020; Singh et al., 2020). Financial inclusion is a great social implication in which the bridge between poorest and rich population can be minimized, while the rural-urban divide in terms of access to financial services is easily filled. On the side of merchants and retailers (Singh & Sinha, 2020), the unprecedented transformations attribted to m-wallet are illsurated by a sharp decline in operations costs and time, and the fact this technology offers more opportunities to the poorest population. In addition, microfinance services and transactions are henceforth within the rural population's reach (David-West et al., 2020; Gichuki & Mulu-Mutuku, 2018; Lashitew et al., 2019; Diniz et al., 2014) and can better help to fight poverty and ensure global financial inclusion.

The m-wallet market, which has already embarked about $368 billion on mobile money transactions in 2017, is expected to reach $2.1 trillion in 2023, with a potential growth of 36.5% each year (Payments Industry Intelligence, 2020). This huge market potential is driven by multiple factors like diffusion of mobile devices and apps, the adoption of near field communication (NFC) technology or the availibility of m-wallet solutions (Allied Market Research, 2019). For example, over 2.26 billion smartphones were used in 2017 around the world (Global Market Insights, 2019); this number was about 3 billion in 2018, and it is expected to reach 3.8 billion by 2021 (Takahashi, 2018). Also, it is estimated that by 2025, smartphones will account for more than 77% of internet-enabled devices (Global Market Insights, 2019).

For the case of developing countries, analysts have identified some specific catalysts of and constraints to the m-wallet diffusion (Allied Market Research, 2019; Zion Market Research, 2019). For example, the lack of regulations and monitoring for mobile payments has been considered as a critical enabling factor for m-wallet growth in many African countries. At the same time, the reluctance of merchants hinders m-wallet growth in Asian Pacific countries (Allied Market Research, 2019). Some other constraints to m-wallet include security issues, the embryonic stage of m-wallet related technologies, issues related to the technology's initial investment and deployment, the compatibility and cost issues (Allied Market Research, 2019), increasing hacking and fraud cases, and the lack of trust (Zion Market Research, 2019) (Table 1). In order to cup with these obstacles, m-wallet solutions such as ApplePay, Google Wallet, WeChat Pay, AliPay, and Samsung Pay have emerged and are dominating the market. For example, Samsung Pay is estimated to be used in about 10 million stores in the U.S., while Apple Pay is accepted by millions of stores (Hawlk, 2019).

3. THEORETICAL BACKGROUND

In this study, we consider m-wallet a technological innovation, as defined by Zaltman et al. (1973) for whom an innovation is "any idea, practice, or material artifact perceived to be new by the relevant unit of adoption" (p. 10). When dealing with the adoption and use of technological innovations by individual users, several research streams have underscored the importance of understanding not only the critical drivers of or impediments to their adoption by potential users but also the most favorable technology acceptance model (TAM) for it.

Originated from the theory of reasoned action (TRA) (Ajzen & Fishbein, 1980), TAM was developed and proposed by Davis (1989) to predict user acceptance and use of information technology. At the core of TAM, we have two critical constructs, perceived usefulness (PU) or "the degree to which a person believes that using a particular system would enhance his or her job performance." (p. 320) and perceived ease of use (PEOU), defined as "the degree to which a person believes that using a particular system would be free of effort" (p. 320) (Davis, 1989). These constructs are considered as important perceived characteristics of innovations through which various perceptions of IT usage contexts could be captured (Benbasat & Barki, 2007). PU and PEOU have been consistently identified as essential contributors of IT adoption and use (Lee et al., 2003; Xu et al., 2010).

Despite some criticism (Benbasat & Barki, 2007), TAM is considered as "the most influential and commonly employed theory in information systems" (p. 212) (Benbasat & Barki, 2007). Multiple variations and extensions of the TAM have been proposed (Hong, 2019; Khan et al., 2017). For example, Venkatesh and Davis (2000) drew on a longitudinal study based on data from four different systems in four organizations where ITs were supposed to be both voluntarily and obligatorily used to propose an extension of TAM called TAM2. In TAM2, the authors found that "both social influence processes (subjective norm, voluntariness, and image) and cognitive instrumental processes (job relevance, output quality, result demonstrability, and perceived ease of use) significantly influenced user acceptance" (p. 186). Later, Venkatesh and Bala (2008) proposed TAM3, another extension of the TAM, which is a comprehensive nomological network of the determinants of individual-level IT adoption and use (p. 273). In another study, Venkatesh et al. (2003) proposed a unified theory of acceptance and use of technology (UTAUT) that has four core determinants (performance expectancy, effort expectancy, social influence, and facilitating conditions) of intention and usage, and up to four moderators of key relations (p. 425).

Besides, Venkatesh et al. (2012) extended UTAUT to UTAUT 2 by adding three new core constructs, namely hedonic motivation, price value, and habit, all of which would better help to study the consumer's acceptance and use of IT. Alshare et al. (2015) developed another TAM extension that integrated some cultural dimensions proposed by Hofstede to study students' effort of learning enterprise resource planning systems. Choi and Totten (2012) also introduced an extended version of TAM to investigate the impact of cultural differences (individualism vs. collectivism) and individuals' self-construal (independent vs. interdependent) on the acceptance of mobile TV (p. 1525). Authors might consult literature reviews on TAM (e.g., (Mortenson & Vidgen, 2016)). TAM-related models have been used to study a range of ITs in various settings (King & He, 2006; Schepers & Wetzels, 2007, Dwivedi et al., 2011; Venkatesh et al., 2016). TAM offers an interesting perspective to study m-wallet user behaviors since it has been shown to be "a valid and robust model that has been widely used, but which potentially has wider applicability" (p. 740) (King & He, 2006). Table 2 synthesizes the some key hypotheses on mobile wallet.

In this regard, the increasing interest on m-wallet studies in emerging economies should be highlighted (Singh & Sinha, 2020; Singh et al., 2020; Leong et al., 2020), following the trends of developed economies (Shaw, 2014). This clearly evidences the perceived usefulness of the m-wallet (Singh et al., 2020; Singh & Sinha, 2020; Shaw, 2014) no matter the location. It is a commonly supported construct in the m-wallet adoption process in both emerging and developed countries. However, while research consider the perceived ease of use as an important construct for m-wallet in

Table 1. Potential drivers of and constraints of m-wallet

Potential drivers of m-wallet	References
Enabling cashless transaction	(Singh & Rana, 2017; Tiwari et al., 2019)
Enhancing consumers' convenience by enabling flexible and faster monetary transactions	(Amin et al., 2016; Megadewandanu et al., 2016; Yunus et al., 2016; Singh & Rana, 2017; Hawlk, 2019)
Saving time	(Singh & Rana, 2017; Mawejje & Lakuma, 2019)
Ensuring secure transaction information via encryption	(Hawlk, 2019; Zhao et al., 2019)
Safe to use	(Amin et al., 2016; Tiwari et al., 2019)
Easy to use	(Amin et al., 2016; Tiwari et al., 2019)
Large base of mobile phone subscribers	(Merritt, 2013; Taheam et al., 2016; Iman, 2018; Lashitew et al., 2019)
Ubiquity or the ability to conduct payment at anytime from anywhere	(Gao & Waechter, 2017)
Large base of connected consumers via mobile devices	(Zhao et al., 2019)
Transparent payment systems	(Chawla & Joshi, 2019)
Enabling and improving financial inclusion	(Yunus et al., 2016; Mawejje & Lakuma, 2019)
Increasing adopting firm's revenues	(Zion Market Research, 2019)
Reducing adopting firm's operating cost	(Zion Market Research, 2019)
Reducing thefts	(Zion Market Research, 2019)
Improving end-user satisfaction	(Zion Market Research, 2019)
Facilitating the fight against poverty	(Pedro et al., 2015)
Facilitating entrepreneurship	(Pedro et al., 2015)
Improving employment	(Pedro et al., 2015)
Enhancing productivity	(Pedro et al., 2015)
Potential constraints to m-wallet	
Security	(Allied Market Research, 2019)
Infancy of m-wallet related technologies	(Allied Market Research, 2019)
Initial investment and deployment issues	(Allied Market Research, 2019)
Compatibility	(Allied Market Research, 2019)
Cost	(Allied Market Research, 2019)
Increasing hacking	(Zion Market Research, 2019)
Increasing fraud cases	(Zion Market Research, 2019)
Lack of trust	(Zion Market Research, 2019)

emerging economies (e.g., India) (Singh et al., 2020), this construct did not have the same importance in a developed country like Canada (Shaw, 2014). Moreover, it can be seen that there are some barriers to the adoption of m-wallet, which illustrates a certain degree of resistance. They include risk barriers, usage barriers and traditional barriers, among others (Leong et al., 2020).

4. RESEARCH MODEL AND HYPOTHESES

In this study, we developed and tested a conceptual model to assess external and cultural factors that come into play when adopting and using m-wallet for the purpose of financial inclusion (Figure 1). To this effect, the literature on the adoption, use, and impact of information technology (IT) was collected and analyzed while integrating two cultural constructs from the GLOBE study (House et al., 2004; Hofstede, 2006). In other words, this study builds on (Xu et al., 2010), and considers a set of technology factors (perceived usefulness, perceived ease of use, fun to use, monetary value), external factors (peer influence and perceived status benefit), and cultural factors (humane orientation and societal collectivism) to assess the intention to adopt and use m-wallet for financial inclusion.

In this context, we hypothesized that the user-perceived usefulness, perceived ease of use, fun to use, monetary value related to m-wallet (technology factors), peer influence, and perceived status benefit linked to m-wallet (external factors) would have a direct impact on m-wallet adoption intention, all of which in turn will have a direct influence on the actual use of m-wallet. We also postulated that two cultural factors, namely humane orientation, and societal collectivism, would have a direct influence on the actual use of m-wallet. Finally, we postulated that the actual use of m-wallet would have a direct influence on financial inclusion (Figure 1).

4.1 Technology Perception Factors Influencing M-Wallet Adoption Intention

4.1.1 Perceived Ease of Use and Perceived Usefulness

TAM-related models have consistently found that PU and PEOU are strong predictors of the behavioral intention of potential users of any technological innovation (Davis, 1989; Davis et al., 1989; Venkatesh & Davis, 2000; Venkatesh & Bala, 2008). These findings have been confirmed by prior studies that explored the determinants of internet banking adoption intention (Siu-Cheung & Lu, 2004), mobile commerce (Chong et al., 2012), social media adoption and use (Fosso Wamba et al., 2017), computer usage (Srite et al., 2008), mobile shopping applications adoption (Natarajan et al., 2017), and m-wallet adoption and use (Shaw, 2014; Amin et al., 2016; Eappen, 2019; Singh et al., 2020) (Table 2). Based on these prior studies, we hypothesize the following:

Hypothesis 1: PU will positively influence the intention to use m-wallet.
Hypothesis 2: PEOU will positively influence the intention to use m-wallet.

4.1.2 Fun To Use

The fun derived from using an IT is an hedonic motivation that is often conceptualized as perceived enjoyment (Venkatesh et al., 2012). Perceived enjoyment is defined as "the extent to which the activity of using the computer is perceived to be enjoyable in its own right, apart from any performance consequences that may be anticipated" (p. 1113) (Davis et al., 1992). It has been found to play an important role in deciding to accept or reject a given IT (Venkatesh et al., 2012). The mobile wallet causes a novelty between the users, bringing in which consumers are thrilled with the possibility to make its payments (Leong et al., 2020). Therefore, we hypothesize the following:

Hypothesis 3: Fun to use will positively influence the intention to use m-wallet.

4.1.4 Monetary Value

Monetary value, which is defined as "a consumer's cognitive trade-off between the quality and performance of the new platform and the monetary sacrifice for using it" (p. 1307) (Xu et al., 2010), has been considered as an important factor during the technology adoption process by potential users (Turel et al., 2007; Xu et al., 2010; Venkatesh et al., 2012; Baishya & Samalia, 2020). For example,

Table 2. Sample empirical studies on mobile wallet

Authors(date)	Methodology	Country (sample)	Key hypotheses			Findings
(Singh et al., 2020)	Online survey	India (206)		Relationship		
			Perceived ease of use	+	Intention to use m-wallet	Supported
			Perceived usefulness	+		Supported
			Perceived risk	-		Rejected
			Attitude	+		Supported
			Intention to use m-wallet	+	Satisfaction	Supported
			Satisfaction	+	Recommendation to use	Supported
(Singh & Sinha, 2020)	Online survey	India (315)	Perceived compatibility	+	Perceived usefulness	Supported
			Awareness	+	Perceived usefulness	Supported
			Perceived usefulness	+	Intention to use m-wallet	Supported
			Perceived cost	-	Intention to use m-wallet	Rejected
			Perceived trust	+	Intention to use m-wallet	Supported
			Perceived customer value addition	+	Intention to use m-wallet	Supported
(Leong et al., 2020)	Mall intercept technique	Malaysia (478)	Age	-	M-wallet resistance	Rejected
			Education	-		Supported
			Income	-		Rejected
			Usage barrier	+		Supported
			Value barrier	+		Supported
			Risk barrier	+		Supported
			Tradition barrier	+		Supported
			Image barrier	+		Rejected
			Perceived novelty barrier	-		Supported
(Shaw, 2014)	Online survey	Canada (284)	Perceived usefulness	+	Intention to use m-wallet	Supported
			Perceived ease of use	+	Intention to use m-wallet	Rejected
			self-efficacy	+	Perceived usefulness	Rejected
			self-efficacy	+	Perceived ease of use	Supported
			Informal learning	+	Intention to use m-wallet	Supported
			Informal learning	+	Perceived usefulness	Supported
(Shin, 2009)	Online survey	Korea (296)	Attitude	+	Intention	Supported
			Intention	+	Usage	Supported
			Perceived usefulness	+	Attitude	Supported
			Perceived ease of use	+	Attitude	Supported
			Perceived security	+	Intention	Supported
			Trust in virtual malls	+	Intention	Supported
			Self-efficacy	+	Intention	Rejected
			Social influence	+	Intention	Rejected
(Eappen, 2019)	Online survey	India (240)	Perceived usefulness	+	Intention	Supported
			Perceived ease of use	+	Intention	Supported
			Perceived ease of use	+	Perceived usefulness	Supported
			Willingness to share information	+	Intention	Supported
			Increase in trust	+	Intention	Supported
			Increase in trust	+	Willingness to share information	Supported
			Increase in trust	+	Perceived usefulness	Supported
(Yap & Ng, 2019)	Online survey	Malaysia (384)	Convenience	+	Perceived usefulness	Supported
			Confidentiality	+		Rejected
			Social Influence	+		Supported
(Amin et al., 2016)	Paper-based survey	Bangladesh (104)	Perceived usefulness	+	Attitude	Supported
			Perceived usefulness	+	Intention to use	Supported
			Attitude	+	Intention to use	Supported
			Perceived ease of use	+	Intention to use	Rejected
			Perceived ease of use	+	Attitude	Supported
(Madan & Yadav, 2016)		India (210)	Social influence	+	Intention	Supported
			Effort expectancy	+	Behavioral intention	Rejected
			Performance expectancy	+	Behavioral intention	Supported
			Facilitating conditions	+	Behavioral intention	Supported
			Perceived value	+	Behavioral intention	Supported
			(Low) Perceived risk	+	Behavioral intention	Rejected
			Perceived trust	+	Behavioral intention	Supported
			Perceived regulatory support	+	Behavioral intention	Supported
			Promotional benefits	+	Behavioral intention	Supported

Figure 1. Research model
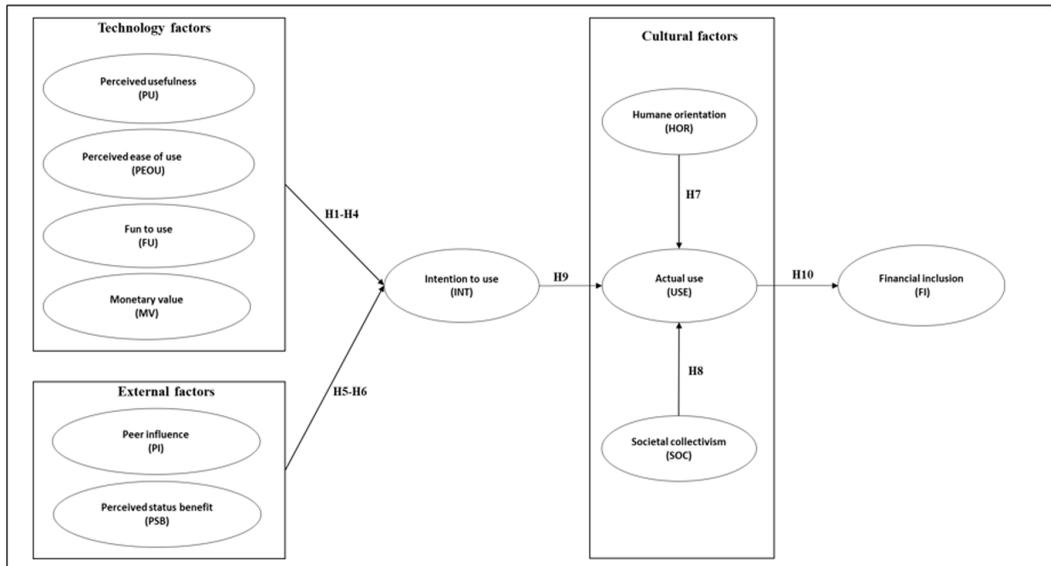
this finding was revealed by Baishya and Samalia (2020) for the behavioral adoption intention of smartphones by the bottom of the pyramid. Similarly, various scholars have identified a positive relationship between monetary value and behavioral adoption intention as they studied electronic government services (Lallmahomed et al., 2017), and mobile health services in a developing country (Alam et al., 2020). Since the price of using m-wallet are relatively low compared to its performance and potential benefits, we propose the following hypothesis:

Hypothesis 4: Monetary value will positively influence the intention to use m-wallet.

4.2 External Factors Influencing M-Wallet Adoption Intention

4.2.1 Peer Influence

Peer influence (e.g., family, friends), which is defined as "the degree to which an individual perceives that important others believe he or she should use the target technology "(e.g., m-wallet) (p. 1308) (Xu et al., 2010), has been considered as an important determinant of IT adoption and use (Chau & Hu, 2002, Venkatesh et al., 2003; Xu et al., 2010). Prior studies using TAM-related models found that peer influence positively influences the behavioral intention to use IT, including in the context of cleaner production technology (Khorasanizadeh et al., 2016), and IT adoption by professionals (Chau & Hu, 2002). Therefore, we propose the following hypothesis:

Hypothesis 5: Peer influence will positively influence the intention to use m-wallet.

4.2.2. Perceived Status Benefits

Prior studies have identified that factors such as perceived status benefits (López-Nicolás et al., 2008) and image (Fosso Wamba et al., 2017) from an IT will influence both the behavioral intention to use IT and the attitude toward the said technology. Prior literature found that if the consumer's habits (status quo) satisfactory, they are unwilling to adopt new technology (Leong et al., 2020). In this regard, if the consumers have a positive image and impression of the new status quo generated

by the mobile wallet, it could support the consumer's transition toward this option. Therefore, we propose the following hypothesis:

Hypothesis 6: Perceived status benefit will positively influence the intention to use m-wallet.

4.3 Cultural Factors Influencing M-Wallet Actual Use

The cultural factors imply that different features of human society impact on the use of a given technology (in our case, m-wallet). One of them is culture, which includes beliefs. Culture is a collective phenomenon that could be defined as "a set of shared values and beliefs" (p. 293), while "beliefs are people's perceptions of how things are done in their countries" (p. 293) (Javidan & House, 2001). Culture has been viewed as "a collective programming of the mind that discerns the members of one group of people from another" and encompasses the "unwritten rules of the social game"(p. 6) (Hofstede et al., 2010). Several dimensions have been proposed to assess culture in terms of values and practices, including humane orientation and societal collectivism (Javidan & House, 2001).

Humane orientation is defined as the "degree to which a society encourages and rewards individuals for being fair, altruistic, generous, caring, and kind to others." (p. 301) (Javidan & House, 2001). In such environments, "human relations, sympathy, and support for others—especially the weak and the vulnerable—are highly valued." More importantly, the sense of belonging and sympathy is highly valued, and each group member is expected to care for the well-being of the others. (p. 301) (Javidan & House, 2001).

Societal collectivism is defined as "the degree to which organizational and societal institutional practices encourage and reward collective distribution of resources and collective action" (p. 160) (Krishnan & AlSudiary, 2016). This means that group members are highly interdependent in such circumstances.

Prior studies have shown that the diffusion and use of IT may improve the sense of belonging and affiliation and build mechanisms for promoting the well-being of others in societies with high humane orientation and high societal collectivism (Krishnan & AlSudiary, 2016). Moreover, studies have concluded that Sub-Saharan Africa's societies are characterized by a high humane orientation tendency as "persons in these societies tended to have higher levels of concern for family and others than for their own well-being and personal goals" (p. 1) (Gutterman, 2017). M-wallet adoption and use may fooster the sense of belonging as it will offer a new way for people from a given community to quickly provide financial assistance to those in need. Therefore, we hypothesize the following:

Hypothesis 7: Humane orientation will positively influence the actual use of m-wallet.

Similarly, Sub-Saharan Africa societies were identified to be high on collectivism (Gutterman, 2017). In this context, m-wallet may be a cost-effective way for wealthy members of these societies to devote part of their assets to improve the welfare of the group members anywhere and anytime (Gutterman, 2017). Therefore, we hypothesize the following:

Hypothesis 8: Societal collectivism will positively influence the actual use of m-wallet.

4.4 Exploring The Impact of Intention On Actual Use and Financial Inclusion

It has been consistently proven that the behavioral intention to use IT is a key predictor of the actual use of the said IT (Venkatesh et al., 2003; Venkatesh et al., 2008). This result has been confirmed when exploring the adoption of short messaging services (Turel et al., 2007), the use of business management software (Hernández et al., 2008), the adoption of e-government learning (Shyu & Huang, 2011), the use of ICT for development (Venkatesh et al., 2019), and the adoption and use of

near field communication technology (Dutot, 2015). Furthermore, Venkatesh et al. (2014) have been calling for studies on the adoption of individual-level technologies with emphasis on the impact of using such ITs. Therefore, we hypothesize the following:

Hypothesis 9: Intention to use will positively influence the actual use of m-wallet.

Prior studies have shown that the actual use of IT may foster financial inclusion everywhere, and especially in developing countries. For example, Schuetz and Venkatesh (2020) argued that blockchain technology can facilitate financial inclusion in rural regions in India. Financal inclusion is actually fostered by the actual use of m-wallet through the possibility it offers to directly deposit money into a savings account, withdraw money from the same, pay bills, and send money to or receive it from friends, family members, suppliers or customers. Therefore, we hypothesize the following:

Hypothesis 10: Actual use will positively influence financial inclusion.

5. METHODOLOGY

5.1 Research Settings

Cameroon is considered the driving force of Central Africa's economy. Located at the bottom of the Gulf of Guinea, it has several large cities, including Yaoundé and Douala. Cameroon covers an area of 475,442 km^2 and harbors about 25,216,237 million inhabitants in 2019, who, apart from English and French (the country's official languages), speak around 240 national languages (INS, 2019; PRC, 2019; Worldbank, 2019). English and French are spoken by 70% and 30% of the population, respectively (INS, 2019; PRC, 2019).

Moreover, Cameroon's telecommunication market is dominated by MTN Cameroon, with about 38.41% of market shares in 2017 (ART, 2017), followed by the mobile operator ORANGE Cameroun with 32.03% of market shares (ART, 2017). CAMTEL comes third with an estimated market share of 17.18% in 2017 (ART, 2017). A newcomer, the Viettel Cameroun, is consolidating its position in the sector, with 12.38% in 2017. Yoomee and SNS Mobility are virtual network operators acting mostly in urban areas (Table 3). They target potential subscribers, sometimes relying on other operators to support their networks (ART, 2017).

In 2019 the total number of mobile subscribers reached 19.10 million, accounting for 76% of the Cameroonian population (Kepios, 2019). Mobile broadband connections (3G & 4G) account for about 23%. In general, about 99% of all mobile connections are pre-paid, and only 1% is post-paid (Kepios, 2019). In terms of mobile connectivity, the country's overall index score stands at 42.76 on 100—with 25.69 for the mobile network infrastructure, 58.64 for affordability of devices and services, 54.90 for consumer readiness, and 40.42 for availability of relevant content and services (Kepios, 2019).

This huge market potential has pushed many of the telecommunication providers to create partnerships with local banks to launch m-wallet services (Table 3). It is not possible for a Cameroon-based telecommunication operator to launch an m-wallet service without partnering with a foreign counterpart. Mobile money services have been, over the last decade, considered a vital tool in improving financial inclusion in Africa in general, and in Cameroon in particular.

5.2 Measures, Sample and Data Collection

To test our proposed hypotheses, we used a cross-sectional survey design. A survey (both web-based and paper-based) was developed both in French and English to collect data from m-wallet users in Cameroon. Measurement items drawn from prior studies and adapted to the context of m-wallet were used to design the survey. More precisely, our constructs were adapted from various sources as following: perceived ease of use from Davis et al. (1989); Venkatesh and Davis (2000), perceived

Table 3. Key players of m-wallet market in Cameroon

Companies (Technical Partner)	Issuers (financial institution)	Trade name	Mobile Money Form	Services Offered	Technologies used	Market share
MTN Cameroun	Afriland First Bank	MTN Mobile Money	Mobile payment	Sending and receiving money in Cameroon; Paying tuition fees in secondary schools; Paying university fees; Pay bills (electricity, water); Send money to Central Africa;	ECW (Ericsson Converged Wallet) & MyMTN (Android Application)	40.7% in 2018
Orange Cameroun	BICEC	Orange Money	Mobile Payment	Deposit money; Withdrawing money; Transfer money; Buy communication and internet credit; Pay bills; Pay for products and services (TV packages, insurance, tuition, university fees, Tontines, Transportation tickets); Receiving salaries; Transfer money between your bank account and your Orange Money;	ECW (Ericsson Converged Wallet), My Orange (Android Application) & USSD	40.3% in 2018
Société Générale Cameroun	Groupe Société générale	YUP	Mobile Payments & mobile banking	Deposit money; National and international money transfer; Withdrawing money; Payment of bills; Merchant payment; Topping up mobile communication credit; Mass payment, which includes payments of salaries, bonuses, advances, and various fees that a business usually pays in cash or by cheque; Cash receipts; The YUP Invoice;	Tagpay (fintech)	Less than 10% in 2018

Source: Adapted from Mag (2019), Sylvain (2019), Stéphane (2019) and ART (2017)

usefulness from Venkatesh and Davis (2000); Davis et al. (1989); Davis (1989); Venkatesh et al. (2003), intention to use from Davis (1989); Venkatesh and Davis (2000), societal collectivism from House et al. (2004), Humane orientation from Hofstede (2006); House et al. (2004), fun to use from Bruner and Kumar (2005), actual use of m-wallet from Choudrie et al. (2017), peer influence from Kim et al. (2011), monetary value from Lee et al. (2012), perceived status benefits from López-Nicolás et al. (2008), and financial inclusion from Le et al. (2019). A 7-point Likert scale enabled us to assess all the measurement items. A survey pre-testing involving eight active m-wallet users was conducted to check for content validity. Based on their comments and suggestions, minor changes were made on the final surveys before the pilot testing. The pilot study of the two types of survey was conducted from 7 to 10 December 2019, with a total of 61 usable observations from active m-wallet wallet users. The pilot enabled us to test the robustness of our proposed model before the final data collection.

The final data collection was conducted from 11 to 30 December 2019. For the online data collection, an invitation letter explaining the objectives of the study, as well as the link to each survey, was sent to all active m-wallet users via social networks (e.g., Facebook, WhatsApp) in order to encourage them to participate in the study. An incentive worth € 1.52 (or CFA 1000) was offered to those who completed the survey as qualified participants. Qualification assessment (to ensure participants are active m-wallet users) was conducted through putting a filter at the beginning of the questionnaire to eliminate non-active m-wallet users or respondents without an m-wallet account. At the end of the survey, the incentive was directly transferred into each participant's m-wallet account

according to the relevant information provided. This actually allowed us also to check for duplication cases and remove the corresponding data from the dataset.

A total of 741 active m-wallet users eventually agreed to participate in the study (46 for the online survey in English, 580 for the online survey in French, 100 for the paper-based survey in French and 15 for the paper-based survey in English). After a careful analysis of the responses, 621 surveys (39 for the online survey in English, 484 for the online survey in French, 88 for the paper-based survey in French and 10 for the paper-based survey in English) were identified as being properly filled out and appropriate for further analysis, resulting in a response rate of 83.81%. According to gender, 65.5% of the qualified respondents were males, and 34.5% were females (Table 4). Most respondents (61.7%) fell in the 18–25-year-old age group, followed by those aged between 26 and 33 years old (24.8%). The sample was dominated by undergraduates (51.7%), followed by holders of secondary school diplomas/certificates (20.5%) and postgraduates (Masters/Ph.D.) (19.3%). This distribution is not unusual as for samples dealing with m-wallet. Indeed, analysts found that millennials (people between 23 to 38) and Gen Z (those between 7 and 22) members represent the primary user groups of m-wallet (Payments Industry Intelligence 2020). In terms of geographic location, 55% of the respondents were residents of the Metropolitan areas, while 36% were from the Regional areas and 9% from Rural areas (Table 4).

5.3 Data Analysis

A variance-based partial least squares (PLS) structural equation modeling (SEM) tool called *SmartPLS 3.0* (Ringle et al., 2014) was used to test our proposed model. The assessment of the measurement model relied on variables such as item loadings, the composite reliability, and the convergent and discriminant validity. In SmartPLS, we ran a complete bootstrapping operation with 5000 subsamples. As a reminder, bootstrapping is a nonparametric resampling procedure that "draws a large number of samples from the original data (with replacement) and estimates models for each sample. It is used to determine standard errors of coefficient estimates to assess the coefficients' statistical significance without relying on distributional assumptions" (p. 215) (Hair et al., 2018).

We looked at the Cronbach's alpha (α) and composite reliability (CR) values in order to assess internal consistency. The values of α and CR ranging between 0.70 and 0.90 are considered satisfactory (Hair et al., 2018). To check for convergent validity, we explored the indicator reliability and the average variance extracted values (AVE). The outer loadings of all these indicators should be above 0.70, while the AVE values should be higher than 0.50 in order to be accepted (Hair et al., 2018). To evaluate the discriminant validity, we computed the square root of the AVE from each construct and found that all were higher than the inter-construct correlation (Hair et al., 2018).

6. RESULTS

6.1 Measurement Model Assessment

Table 5 synthesizes the reflective measurement model results. It reveals that all item loadings are above the minimum threshold of 0.7, except for USE1, USE2, USE7, USE8, and USE9. Indeed, after dropping the item USE10, the AVE, α, and CR of USE were respectively higher than 0.50, 0.70, and 0.70. Therefore, we decided to keep them for the rest of the analysis, as suggested by (Hair et al., 2018). These authors suggested that items with outer loading between 0.40 and 0.70 "should be considered for removal from the scale only when deleting the indicator leads to an increase in the composite reliability (or the average variance extracted…) above the suggested threshold value" (p. 113). Since the values of CR and AVE of USE are already above the suggested threshold values, we have decided to keep them (USE1, USE2, USE7, USE8, and USE9) for further analysis.

The same table indicates that all the value of α and CR exceeds the threshold value (0.7), thus suggesting high levels of internal consistency and reliability of all our constructs. Also, all AVE values

Table 4. Demographic profile (n = 621).

Gender		
	n	%
Male	407	65.5
Female	214	34.5
Total	621	100
Age		
	n	%
18-25	383	61.7
26-33	154	24.8
34-41	46	7.4
42-49	21	3.4
50+	17	2.7
Total	621	100
Education level		
	n	%
No formal qualification	8	1.3
Primary qualification	12	1.9
Secondary qualification	33	5.3
College qualification (diploma/certificate)	127	20.5
Undergraduate degree	321	51.7
Postgraduate degree (Master/Ph.D.)	120	19.3
Total	621	100
Geographic location		
	n	%
Metropolitan	342	55
Regional	224	36
Rural	55	9
Total	621	100

exceed the threshold value of 0.5. Therefore, the measures of all our constructs have a high level of convergent validity (Hair et al., 2018). Finally, we calculated the square root of the average variance extracted (AVE) in the diagonals of the correlation matrix (Table 6, in bold). We can see that all these calculated values are higher than the intercorrelations of the construct with the other constructs, which means that the discriminant validity is ensured (Fornell & Larcker, 1981, Hair et al., 2018).

6.2 Structural Model Assessment and Hypotheses Testing

Table 7 shows that PU is a good predictor of INT (β=0.200, p=0.002), as well as PEOU (β=0.293, p=0.000), FU (β=0.130, p=0.006), MV (β=0.164, p=0.001), and PI (β=0.199, p=0.000). These results support **H1, H2, H3, H4 and H5**. However, the effects of PSB seem not to have a significant

impact on INT (β=0.005, p = 0.914); therefore, **H6** is not validated. Moreover, the proposed model explains 67.80% of the variance in intention to use (R^2=0.678) (Table 8).

In addition, Table 7 also reveals that INT is the strongest predictor of USE (*β*=0.507, *p*=0.000), followed by HOR (*β*=0.218, *p*=0.000), thus validating **H9** and **H7**. However, SOC has a non-significant relation with USE (*β*=0.055, *p*=0.158). As a result, **H8** is not supported. Finally, Table 7 shows that USE is a strong predictor of FI (*β*=0.574, *p*=0.000), which supports **H10**. The model explains 47.5% of the variance of the endogenous construct USE (R^2=0.475), while USE explains 32.90% of the variance of FI (R^2=0.329) (Table 8).

6.3 Testing For Common Method Bias (CMB)

When using SEM-PLS, it is necessary to assess common method bias as it may inflate relations in the structural model (Chin et al., 2012). Several methods are proposed to assess CMB (Podsakoff & Organ, 1986; Lindell & Whitney, 2001; Kock, 2015). In this study, we used the approach proposed by Kock (2015) and explained by Gaskin (2017). First, we connected all our constructs to the dependent variable FI. Then, we ran the consistent PLS algorithm within SmartPLS 3. Afterwards, we assessed the collinearity statistics (VIF) values at the factor level. These values should be less than 3.3 (Kock, 2015) or possibly reach 5 (Kock & Lynn, 2012). We obtained VIF values between 2.466 to 3.971, which suggests the inexistence of CMB.

7. DISCUSSION

In this work, we proposed a model to investigate the mobile wallet user acceptance and its influence on the financial inclusion viability in an emerging representative economy, namely Cameroon, a Central African country. More specifically, we developed a model to answer the following two questions: *RQ1: What are the key factors that predict m-wallet intention to adopt? RQ2: Is m-wallet adoption suitable to leverage financial inclusion in Cameroon?* In this regard, it should be noted that the extension of literature's findings involved developing countries as we explored key determinants of m-wallet adoption and use while analyzing its impact (Shin, 2009; Shaw, 2014; Bailey et al., 2017; Madan & Yadav, 2016; Eappen, 2019; Singh & Sinha, 2020).

From this perspective, this study theorized and found support for a model that draws on a TAM adapted with an inclusion of external and cultural factors to predict the adoption, use, and impact of m-wallet. The model explains 32.90% of the variance of FI (R^2=0.329), thus suggesting that the proposed model is suitable for predicting the adoption and use of m-wallet as well as its potential impact.

When dealing with technology factors, our study found that PU is an essential predictor of INT. This finding is consistent with prior studies on IT adoption (Davis, 1989; Venkatesh & Davis, 2000; Fosso Wamba et al., 2017) as well as the emerging studies on m-wallet adoption (Shaw, 2014, Amin et al., 2016; Eappen, 2019; Singh & Sinha, 2020; Singh et al., 2020). However, while our study found that PEOU is a significant predictor of INT, which is consistent with major prior studies on IT adoption (Davis, 1989; Venkatesh & Davis, 2000; Fosso Wamba et al., 2017) and the emerging literature on m-wallet adoption (Eappen, 2019; Singh & Sinha, 2020; Singh et al., 2020), it contradicts the findings by Shaw (2014), and Amin et al. (2016) who found that PEOU doesn't play an important role in predicting the intention to adopt m-wallet in Canada and Bangladesh. Future studies should more deeply explore this relation in order to increase the understanding of these contradictory findings. Moreover, our findings revealed that FUN to USE is a strong predictor of the intention to use (INT) m-wallet. This finding is consistent with prior studies on IT adoption (Alalwan et al., 2018; Lee et al., 2019). Furthermore, in line with previous studies, our results show that MV is a significant predictor of the intention to use m-wallet (Turel et al., 2007; Lallmahomed et al., 2017; Baishya & Samalia, 2020).

Table 5. Synthesis of the reflective measurement model results

Constructs	Items	Convergent validity		Internal consistency reliability	
		Loadings	AVE	α	CR
Financial inclusion	FI1	0.794	0.756	0.918	0.939
	FI2	0.906			
	FI3	0.846			
	FI4	0.894			
	FI5	0.900			
Fun to use	FUSE1	0.943	0.896	0.885	0.945
	FUSE2	0.950			
Humane orientation	HOR1	0.718	0.634	0.811	0.873
	HOR2	0.847			
	HOR3	0.766			
	HOR4	0.846			
Intention to use	INT1	0.859	0.740	0.949	0.958
	INT2	0.882			
	INT3	0.896			
	INT4	0.815			
	INT5	0.901			
	INT6	0.882			
	INT7	0.896			
	INT8	0.740			
Monetary value	MV1	0.896	0.817	0.888	0.931
	MV2	0.924			
	MV3	0.891			
Perceived ease of use	PEOU1	0.883	0.814	0.954	0.963
	PEOU2	0.913			
	PEOU3	0.889			
	PEOU4	0.903			
	PEOU5	0.919			
	PEOU6	0.904			
Peer influences	PI1	0.892	0.839	0.952	0.963
	PI2	0.935			
	PI3	0.947			
	PI4	0.925			
	PI5	0.881			
Perceived status benefit	PSB1	0.922	0.828	0.793	0.906
	PSB2	0.898			
Perceived usefulness	PU1	0.889	0.785	0.954	0.962
	PU2	0.890			
	PU3	0.857			
	PU4	0.892			
	PU5	0.904			
	PU6	0.900			
	PU7	0.870			
Societal collectivism	SCO1	0.873	0.741	0.913	0.935
	SCO2	0.879			
	SCO3	0.845			
	SCO4	0.839			
	SCO5	0.867			
Actual use	USE1	0.630	0.503	0.879	0.897
	USE2	0.550			
	USE3	0.861			
	USE4	0.868			
	USE5	0.865			
	USE6	0.853			
	USE7	0.535			
	USE8	0.516			
	USE9	0.551			

Table 6. Correlation table and discriminant validity

	FI	FU	HOR	INT	MV	PEOU	PI	PSB	PU	SCO	USE
FI	**0.869**										
FU	0.640	**0.947**									
HOR	0.654	0.590	**0.796**								
INT	0.662	0.635	0.560	**0.861**							
MV	0.702	0.604	0.552	0.646	**0.904**						
PEOU	0.632	0.580	0.539	0.738	0.624	**0.902**					
PI	0.543	0.540	0.534	0.631	0.487	0.555	**0.916**				
PSB	0.607	0.638	0.555	0.545	0.489	0.492	0.636	**0.910**			
PU	0.662	0.629	0.576	0.727	0.609	0.773	0.586	0.535	**0.886**		
SCO	0.569	0.573	0.647	0.505	0.455	0.488	0.527	0.565	0.515	**0.861**	
USE	0.574	0.518	0.537	0.657	0.524	0.675	0.507	0.471	0.614	0.452	**0.708**

Table 7. Significance testing results of the structural model path coefficients

Path	β	Standard deviation (STDEV)	T-Statistics	P-values	Hypotheses	Accepted/ Rejected
PU -> INT	0.200	0.065	3.083	0.002	H1	Accepted
PEOU -> INT	0.293	0.059	4.937	0.000	H2	Accepted
FU -> INT	0.130	0.047	2.766	0.006	H3	Accepted
MV -> INT	0.164	0.050	3.287	0.001	H4	Accepted
PI -> INT	0.199	0.039	5.046	0.000	H5	Accepted
PSB -> INT	*0.005*	*0.043*	*0.108*	*0.914*	*H6*	*Rejected*
HOR -> ACTUAL USE	0.218	0.049	4.434	0.000	H7	Accepted
SCO -> ACTUAL USE	*0.055*	*0.039*	*1.411*	*0.158*	*H8*	*Rejected*
INT -> ACTUAL USE	0.507	0.041	12.497	0.000	H9	Accepted
ACTUAL USE -> FI	0.574	0.042	13.585	0.000	H10	Accepted

Table 8. R-square

Variable	R Square
FI	32.90%
INT	67.80%
USE	47.50%

Regarding external factors, our study found that PI is a strong predictor of the intention to use m-wallet, a result that is consistent with from the conclusions of a good number of studies on IT adoption and use (Chau & Hu, 2002; Venkatesh et al., 2003; Xu et al., 2010; Khorasanizadeh et al.,

2016). In contrast, our research found that, surprisingly, PSB was not a predictor of the intention to use m-wallet, since its impact is insignificant, albeit positive. However, previous studies have identified a positive and significant relationship between PSB and the intention to use IT (López-Nicolás et al., 2008). Therefore, more studies are need to identify the sources of these inconsistent findings.

When assessing the impact of humane orientation, societal collectivism and the intention to use m-wallet on the actual use of m-wallet, our study unveiled some mixed findings. First, our study confirmed that the intention to use m-wallet is a strong predictor of the actual use of m-wallet, which is consistent not only with prior studies on IT adoption and use (Venkatesh et al., 2003; Venkatesh et al., 2008), but also with the emerging literature on m-wallet adoption and use (Shin, 2009). Second, the study found that the actual use of m-wallet holds a positive, significant relationship with the 'humane orientation' variable. In this vein, it is consistent with prior studies (Krishnan & AlSudiary, 2016). However, regarding the relationship of the actual use of m-wallet with societal collectivism, we found a positive but non-significant effect. Thus, contrary to results by other studies (Krishnan & AlSudiary, 2016). Future studies should try to cut the Gordian knot between these inconsistent findings.

Finally, the current study tried to respond to the call (Venkatesh et al., 2014) for more studies on the adoption of individual-level technologies beyond the intention and actual use by exploring the impact of using such ITs. Here, we hypothesized that the actual use of m-wallet will have a positive and significant effect on financial inclusion. Our study has provided support to this hypothesis.

8. IMPLICATIONS

8.1. Theoretical Implications

The findings of this study have brought interesting theoretical implications to the m-wallet arena. First, in line with previous studies on m-wallet adoption (Singh et al., 2020; Singh & Sinha, 2020; Shaw, 2014), we found that perceived usefulness (PU) is also a good predictor of the intention to adopt m-wallet in Cameroon. In addition, perceived ease of use (PEOU) was proved to be a good predictor of intention to adopt m-wallet. This finding is in line with studies on m-wallet adoption that were recently carried out India (Singh & Sinha, 2020). However, it contrasts with the study by Shaw (2014) on m-wallet adoption in Canada. Furthermore, The results concerning the positive impact of the fun to use (FU), monetary value (MV), peer influence (PI) and humane orientation (HOR) on the adoption of m-wallet bring tremendous theoretical implications, validating these important constructs in a highly representative emerging economy.

Second, although the above-highlithed constructs were strongly accepted as good predictors of the intention to adopt m-wallet, the perceived status benefit (PSB) was suprisingly found to have a non-significant positive effect on the intention to adopt m-wallet. This PSB result contrasts with a previous study on mobile innovations (López-Nicolás et al., 2008). Furthermore, unexpectedly, societal collectivism (SCO) was found to have a non-significant positive effect on the actual use of m-wallet. This outcome contrasts the finding by Lee, Trimi, and Kim (2013) concerning the cultural differences in technology adoption, as these authors concluded that the collectivistic culture for technology adoption behavior is influenced by other people with similar thoughts who already adopted the technology. Finally, we confirmed that the actual use of m-wallet positively influences financial inclusion.

8.2. Practical Implications

In terms of practical implications, the findings of this study unlock stimulating and essential insights for managers and practitioners. In the first place, the positive results concerning PU and PEOU showed that in Cameroon, potential m-wallet adopters expect not only their performance and productivity to be enhanced by the use of m-wallet, but also an increased level of intuitive usability. Therefore, these specific features of m-wallet should be targeted by microfinance institutions (MFI). Besides,

managers and practitioners need to consider the influence of the fun to use m-wallet on potential users. It has been revealed that beyond the usefulness of m-wallet, adopters expect a system that will bring them a good sensation when the operate across the system.

Moreover, peer influence and humane orientation play an important role in m-wallet adoption. In this sense, managers, practitioners and enterpreneurs of the field should develop actions for adequate review monitoring while making recommendations that can contribute to improving the technology features. Regarding the perceived status benefit, which was not found to have a significant effect on m-wallet adoption, it is in the interest of managers and practitioners to ensure that adopters can achieve a different status when they are using m-wallet. Finally, as the actual use of m-wallet influences financial inclusion, it is fundamental that managers, practitioners and enterpreneurs help in developing new features/services with more benefits including the ease of taking advantage of a broader set of financial services.

9. CONTRIBUTIONS

This study contributes to numerous areas of research. The first contribution is directed to the stream of research on IT adoption and use at the individual level by integrating various technology, external and cultural factors to predict the adoption intention, and actual use and impact of m-wallet. The second contribution of this study resides in its attempt to answer the call by Venkatesh et al. (2014) for more studies on the outcomes and consequences of IT adoption and use. Here, we explore how the actual use of m-wallet could foster the financial inclusion of users in a developing country. Financial inclusion has been identified as "a key enabler to reducing poverty and boosting prosperity" (The World Bank Group, 2008). The study, therefore, identified key determinants to be considered by all players of the m-wallet value chain to foster the adoption and actual use of m-wallet, to achieve high-level financial inclusion. The third contribution of this study lies in the extension of the stream of research on m-wallet in an African developing country (Cameroon). This would certainly help to bridge the gap in the growing literature on m-wallet, with very few studies conducted in Africa and in some Asian developing countries.

The fourth contribution of this study is about its results, as these demonstrated that users of m-wallet are mainly driven by the beliefs that it will be useful, easy to use, user-friendly, and entertaining while providing them with some monetary value. More importantly, the study found that key variables such as fun to use, ease of use, usefulness, monetary value, and peer influence can well explain users' behavioral intention to use m-wallet. Therefore, all m-wallet applications and functionalities should bear a certain degree of usefulness, user-friendliness, fun, and cost-effectiveness to increase their chances of being accepted and used. The last contribution of this research is related to its ability to combine two cultural constructs (humane orientation and societal collectivism) with the behavioral intention to use m-wallet with a view to better predicting the actual use of m-wallet, thus suggesting to m-wallet solution providers to take into consideration cultural aspects in their operations. Further studies should integrate more cultural factors (Javidan & House, 2001; Hofstede et al., 2010) to investigate even more the rationale behind the actual use of m-wallet.

10. CONCLUSION, LIMITATIONS, AND RESEARCH DIRECTIONS

The objective of this study was to develop and test a conceptual model for exploring the external and cultural factors that come into play with the intention to adopt and use m-wallet to achieve financial inclusion. A sample of 621 m-wallet users collected in Cameroon via a survey and was used to test the proposed research model empirically. Out of the ten hypotheses that were formulated, eight were eventually supported. This study complements prior studies' findings on the adoption and use of m-wallet and has significant implications on IT-enabled financial inclusion, especially in developing countries.

Therefore, it should be noted that our findings bring fundamental contributions from both literature and managerial implications that investigate the effects of these results. Concerning the limitations of this study, we highlight that the generalization of these findings should be careful since we examined only one country. In this vein, futures cross-country studies applying our research model could be an excellent option to understand the differences between countries, especially related to developing and developed economies.

Another limitation resides in the limited number of constructs used by the proposed model. The list of constructs may be enlarged in future studies in order to include more cultural factors, individual user characteristics, etc. Moreover, the study used a cross-sectional survey to test the model, and thus suffered from potential self-report bias, and only provided a punctual view of the phenomenon under investigation. Future research could use longitudinal studies or mixed-methods approaches to tackle these issues. Lastly, the study solely focuses on the user perspective. This gives the opportunity to future studies to consider exploring factors that will help key stakeholders of the informal economic sector in Africa to adopt and use m-wallet for their various transactions.

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