

Summer 6-15-2016

THE INSTITUTIONALISATION OF MOBILE PAYMENT TECHNOLOGIES IN KENYA: RETAILERS' PERSPECTIVE

Carlo Stepic

University of Cape Town, carlo@afb.com

Salah Kabanda

University of Cape Town, salah.kabanda@uct.ac.za

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Recommended Citation

Stepic, Carlo and Kabanda, Salah, "THE INSTITUTIONALISATION OF MOBILE PAYMENT TECHNOLOGIES IN KENYA: RETAILERS' PERSPECTIVE" (2016). *Research Papers*. 12.

http://aisel.aisnet.org/ecis2016_rp/12

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THE INSTITUTIONALISATION OF MOBILE PAYMENT TECHNOLOGIES IN KENYA: RETAILERS' PERSPECTIVE

Research

Stepcic, Carlo, University of Cape Town, South Africa, carlo@afb.com

Kabanda Salah, University of Cape Town, South Africa, salah.kabanda@uct.ac.za

Abstract

This paper explores the mobile payment phenomenon from SME perspectives in the Kenyan retail sector. Following a qualitative approach, and in-depth interviews, the study concludes that the contextual challenges of Kenya have rendered other forms of mobile payment such as making contactless payments, unknown. However, when other mobile payment options were made known, there was strong support for proximity mobile payments. The findings show that the introduction of any alternative mobile payment option in the Kenyan context would be a challenge against the stable trusted way of conducting mobile payments. It is recommended that strategies for building trust and customer awareness and adoption of alternative payment methods; be prerequisite towards new and alternative mobile payment options by retailers.

The findings show how mobile payments, such as Lipa na MPesa have become institutionalised in the Kenyan SME structures; and how SMES themselves mobilize to legitimize mobile payments. Additional results show that Kenyan retailers are strongly driven by customer's attitude, perception and willingness to adopt new payment methods. They identify mobile network reliability as a challenge and indicated that degradation in service levels resulted in a bad customer experience as it led to confusion of a transactions success.

Keywords: Mobile Payment, SMEs, Adoption, Kenya

1 Introduction

The most common form of electronically facilitated communication in the world today is the mobile phone (Boase and Ling, 2013). "Driven by the increasing mobility of today's modern society" (Schierz, Schilke, and Wirtz, 2010, p. 209), mobile technology has become part of ordinary life. The continuous advancement of technology and mobile devices, has allowed for personal mobile devices to be used to facilitate electronic payments (Hwang, Jan, and Shiau, 2007). As early as the mid-1990s, the use of mobile phones have been promoted to enable business-to-consumer payment transaction processing. The wide distribution of mobile phones, as well as its users' behaviours, led to the first efforts to commercialise mobile payments (Pousttchi, 2008). The use of a mobile phone to conduct electronic payments, has made the mobile phone be perceived as an inclusive technology that allows those who were previously disadvantaged of taking part in the digital economy to do so. For example, in most developing countries, the mobile phone has afforded many the ability to perform payment

transaction processing without having access to the formal bank account and in so doing “transforming cell phones into pocket-banks” (Asong 2013, 7).

As a phenomenon, mobile payment is defined as a payment transaction processing in the course of which the payer employs mobile communication techniques in conjunction with mobile devices for initiation, authorisation or realisation of payment (Pousttchi 2004, p. 260). It is the payment for goods, services, and bills with a mobile devices (such as a mobile phone, smart-phone, or personal digital assistant (PDA) by taking advantage of wireless and other communication technologies” (Dahlberg, Mallat, Ondrus, and Zmijewska, 2008, p. 165). In the early days of mobile payment inception, market research companies published optimistic growth rates for this technology. The consumer adoption rate has however varied per country and often the numbers were lower than anticipated (Shaw, 2014; Schierz et al., 2010). The Gartner Group (2009) indicated that a mere 1% of mobile users used their phones for mobile payments in 2008. The 2010 World Payments Report estimates online payments at EUR 790.1 billion and was expected to reach EUR 1,382.3 billion in 2012. Mobile payments however was estimated at EUR 41.5 billion for 2009 and forecast shows EUR 140 billion for 2012 (Capgemini, 2010). These findings show that mobile payments account for a small percentage of online payments. Although this could change in the near future (Gartner Group 2013), there remains a need to understand why mobile payment has not diffused and been adopted as expected.

For mobile payment to be successful, researchers have called for more attention to be given to understanding user acceptance of mobile payment (Mastercard 2012). On this note, we see a plethora of studies that focus on consumer behaviour towards mobile payment (Mallat 2004). Although there have been studies that investigate retailers use of mobile payments, these are few. With those that do, there has not been a study that determines how retailers chose a specific mobile payment option given their contextual situation. A focus on retailers is necessary because retailers in developing countries and on the African continent in particular are expanding and unfortunately there remains a lack of “detailed understanding of what is a highly-fragmented retail system, and without such an understanding, it is hard to function effectively within the system” (nielsen.com 2015). According to Weatherspoon and Reardon (2003), the rapid rise of retail markets in Africa is made possible partly by urbanization and the rise of the middle class in most of countries such as Kenya and South Africa. These changing contextual factors necessitates the need to understand the role of mobile payment option available to them. Mobile payment studies in developing countries need to be inclusive of contextual variables that makes business operation in these setting unique. Against this background, this study focuses on examining the Kenyan retailer’s perception of mobile payment with the purpose of identifying contextual factors that influence not only mobile payment, but also the choice of selecting a given mobile payment method.

This paper is arranged as follows: Section 2 presents a literature review of mobile payment. The theoretical foundations of the study are presented in Section 3. Section 4 provides the research methodology that was employed for this study. The research philosophy, approach, sampling, collection of data and analysis are discussed. Section 5 presents the results of data analysis and section 6 presents a discussion of the findings in relation to literature. Section 7 concludes the paper.

2 Related work on Mobile payments

The mobile payment ecosystem is complex with various parties and technologies involved (Kemp, 2013; Ondrus and Pigneur, 2005). Chen (2007) identified three potential mobile payment participants: consumers, retailers and a trusted third party. Consumers use the technology to pay for goods or services; and retailers supplies the goods and services. Mobile network operators (MNO) and financial institutions play the role of the trusted third party, which is responsible for authentication and processing of transactions. The role of the MNO ranges from being very passive to very active. MNOs could simply leverage their current billing systems and costs for services can be added to a customer’s phone bill. Alternatively MNOs can provide supporting services to financial institutions (Ondrus and

Pigneur, 2006). Financial institutions typically have established banking infrastructure in place, but they cannot work alone, as mobile devices are the delivery channel of payment services (Pousttchi, 2004). Each of the participants have a vested interest in the success of mobile payments. Regulatory and contractual issues linking the parties must be considered carefully and key issues around revenue models, customer ownership, technology development, risk and liability must be addressed (Kemp, 2013). The participants are also heavily dependent on each other. For example, retailers will not invest in the technology if cards schemes are unable to sell their products to more customers. For the same reason, point-of-sale manufacturers will not invest in mobile point-of-sale technologies, if customers do not adopt mobile payment methods.

A more recent classification of mobile payment methods is offered by Fiserv (2012), a global consulting organisation specialising in providing financial solutions. Fiserve (2012) classified mobile payments into two main categories: remote payment and proximity Payments (see Table 1). Mobile P2P, a category of remote mobile payment describes the mobile payment platform in which a customer sends money to merchants or to each other using their mobile phones (Mobilepaymentstoday, 2011). This platform is often referred to as a Person to Person (P2P) or Person to Business (P2B) platform. A well-known example has been the M-PESA, provided by a leading mobile network operator in Kenya. Mobile at the point of sale involves the payment for items using a mobile phone at the point of sale using NFC technology. This typically includes a tap and go type service such as Google Wallet (Mobilepaymentstoday, 2011).

Mobile payment classifications		Explanation
Remote Mobile Payment	Mobile Banking	access your bank account and to perform transactions
	Mobile Shopping	Purchases made online using mobile web browser, using credit card linked to online account
	Mobile P2P	Person to person money transfer using mobile device
Proximity Mobile Payment	Mobile POS	Making contactless payments by holding phone near or tapping a physical device.
Recipient	paying oneself	using a mobile device to transfer deposits into your personal accounts
	paying other people	using a mobile device to facilitate payments to individuals, or groups of individuals
	paying billers	uses the services of a financial institution’s mobile application or the biller’s mobile application
	paying merchants/retailers	customers making purchases utilising NFC technology, QR codes or a mobile application

Table 1: Mobile payment methods (Fiserv 2014)

Mobile payment have also been classified according to the recipients involved: paying oneself, paying other people, paying billers and paying merchants/retailers (Fiserv 2014). They can also be classified using a direct carrier billing (DCB) - a mobile payment method that is an alternative to using a credit or debit card. Although DCB is perceived as an attractive payment form for markets with higher mobile penetration than bank account penetration, or one where consumers have security concerns regarding sharing personal data online; DCB is still remains in the realm of digital content such as games, music and movies (Mobilepaymentstoday, 2014). Finally, mobile payments can include closed loop mobile payments which allow consumers to load money into a spending account that is linked to a payment device such as a gift card for a specific company (clearbridgemobile.com). Although there are many mobile payment options, there is a need to determine which options in the Kenyan context exist from the retailer perspective and how contextual factors influence the adoption of a specific mobile payment option.

3 Theoretical Framework

This study adopts the TOE framework as an initial framework for examining the mobile payment phenomenon in Kenya. TOE identifies three aspects that influence technology adoption at organisation level: Technological Context, Organisational Context and Environmental Context. These three elements present “both constraints and opportunities for technological innovation” (Tornatzky and Fleischer, 1990, p. 154) and therefore influences the adoption of technology by organisations. The technological context assesses the availability and characteristics of technology, both internal and external to the firm. The factors associated with the technological context are similar to those highlighted in the previous models such as the DOI. So for example, how the organization perceives security of the new technology/innovation was perceived as an important determinant. Using TOE, Shaw (2014), highlighted that security and privacy were still of great concern to customers even though they were still willing to trade risk for the perceived rewards that mobile payments would offer.

The organisational context refers to features, such as formal and informal structures, communication processes, size and slack. The organisational size has been identified as one of the predictors of an organisation’s intentions to adopt IS innovations on the premise that larger firms have a greater need for them, as well as resources, skills and experience and the ability to survive failures, than smaller firms (Ramdani, Kawalek, and Lorenzo, 2009). Organisations that are small in size - like SMEs – tend to lag behind their larger counterparts because of the scarcity of resources needed to initiate the deployment of new information technologies required for the initial set-up and sustenance of E-Commerce (Teo et al., 2009), and because of the smaller volumes of transactions that they conduct (Gibbs et al., 2002; Dholakia and Kshetri, 2004; Windrum and de Berranger, 2002). Uzoka (2008) reports that in Botswana organisational size contributed positively to the adoption of E-Commerce. Contrary evidence from China, however, is reported by Liu (2008) where firm size appeared to be a non-significant factor. Top management support and commitment is a key organisational component that has often been considered crucial in the adoption of technology, as they provide the financial resources necessary for cultivating an organisational climate conducive to its adoption (Teo et al., 2009).

Finally the environmental context describes the overall area in which a business operates, that includes industry, competitors and interactions with governments (Tornatzky and Fleischer, 1990). It allows the exploration of external factors of government, industry and social influences that are deemed as important in either acting as favourable element or barriers towards merchant’s adoption of mobile payment methods. The lack of proper developed legal and regulatory systems that can instil institutional trust have the potential to negatively influence adoption (Iddris, 2013). It is also important that the merchant perceives that consumers and trading partners are able to access and use these technologies; and also are socially ready to participate in the use of the technologies (Molla and Licker, 2005). Merchants who perceive that the market is ready to adopt mobile payment, are likely to do so themselves (Zhai, 2011). The environmental factors through social norms, political influences and market readiness would provide the contextual grounding to understanding circumstantial factors that influence preferences to a given mobile payment approach.

In addition to the TOE framework, the study adopts institutional theory to explain the role of TOE factors in the adoption process of mobile payments. That is, to understand the role of organizational, technological and environmental factors in the adoption process, there is a need to adopt a new theoretical lens that can elucidate the Kenyan context. Tolbert and Zucker’s (1996) view the processes of institutionalization as a four stage approach: innovation, habitualization, objectification, and sedimentation. The innovation stage, identifies factors that influence the adoption of the innovation. It is at this stage that TOE, will add value in identifying such factors. Tolbert and Zucker (1996, 181) see habitualization as the process that ‘involves the generation of new structural arrangements in response to a specific organizational problem or set of problems, and the formalization of such arrangements in the policies and procedures of a given organization, or a set of organizations that confront the same or similar problems’. once habitualized actions are adopted by a collective; ‘the development of some

degree of social consensus among organizational decision-makers concerning the value of a structure, and the increasing adoption by organizations on the basis of that consensus' follows in the Objectification stage (Tolbert and Zucker, 1996, 182). The consensus leads to shared meaning which becomes sedimented in the actors mind, becoming a rubric for the continuity of structures.

4 Methodology

An interpretivism stance was deemed relevant for this study. An interpretivism approach advocates that 'it is necessary for the researcher to understand the differences between humans in our role as social actors' (Saunders, Lewis, and Thornhill, 2009, p. 116). Interpretive methods of research suggest that "our reality is a social construction by human actors" (Walsham, 1995, p. 376). This contrast with positivism, where the researcher believes that the data collected is objective, without influence, and can be used to test prior hypotheses or theories (Walsham, 1995). An interpretivism stance allows for the examination of contextual influencers of mobile adoption at organizational level. It allows researchers to become immersed in the Kenyan context and perceive retailers as intelligible agents who are not only active participants but whose talk is laden with preconceptions, assumptions and beliefs from their cultural settings, and they create and shape their own understanding of mobile payment methods based on their social context.

With an interpretivist stance in mind, the study aligned itself with a qualitative approach and following a survey strategy for data collection. Potential retailers were contacted telephonically, at which point the research purpose was explained and participation requested. Face to face interviews were scheduled with those that accepted. A semi-structured interview process was then followed that allowed the solicitation of retailers perception of mobile payment technologies. The research instrument, which served as the protocol for the interview was developed from the constructs of the theoretical lenses discussed in section 3. The research instrument consisted of three parts: the first section captures technological factors; the second section captures the organisational factors and the final third section captures the environmental factors. A sample size of 19 participants was used. Two of the respondents were in the Machakos County and both were retailers who owned supermarkets. The remaining respondents were from the Nairobi County. Both of these towns were major towns in the capital city. Nine of the participants were retailers who owned supermarkets; four were in the fashion industry; two in the cellular selling business; one was a pharmacy shop and another a bookshop. In addition to interviews, observations of what retailers engage in during their work hours were observed, specifically during a transaction with customers. The environments in which the interviews occurred were very challenging, often very noisy. Retailers in Kenya tend to play loud background music, in an attempt to attract potential customers. Therefore, the quality of the recordings made it difficult to transcribe every word spoken during the interviews. However, observations and follow up of the interviews substantially improved data collection process.

The analysis followed a thematic approach derived from Braun and Clarke's (2006) guidelines on how to conduct thematic analysis. Analysis commenced by listening to the interview recordings to familiarise oneself with the data. Then, each interview was transcribed and typed in Microsoft Word. Each typed interview script was then given back to the respondent for confirmation purposes. The interview transcripts were reread several times and key constructs, extracted from the proposed research framework, and became ideal candidates to represent the initial codes. This was not unexpected, as the line of questioning was tailored towards the theoretical framework, although room was given for more interrogation. Several repetitive patterns were observed within each category and these were further refined to individual distinctive groups or themes.

5 Findings from the TOE perspective

5.1 The Kenyan context

Kenya is situated in East Africa. The largest service provider of mobile payment platform technology to individuals and organisations in Kenya, is also the largest mobile network operator, Safaricom. As such, most people and organisations alike, used the term “M-PESA” and “Lipa Na M-PESA” synonymously to describe the mobile payment platform method. M-PESA is a mobile-phone based money transfer and micro financing services, which facilitates transactions, including person to person transactions. Given the prominence of M-PESA, it became apparent that most retailers were only familiar with this mobile payment method. Safaricom agent outlets were easily available in every street, where retailers were visited. Their branding is therefore visible everywhere, confirmation of Safaricom’s dominance in the market.

Further observations show that interconnect agreements, which facilitates transactions and settlements between different banks, had not been realised. Most retailers still used a central payment island system to process non cash payments. Payment islands consisted of a desk stationed away from the cashiers, where several payment terminals had to be kept in order to support the various banks card holders. Whilst this system enabled retailers to support several bank payment terminals, it resulted in a payment queueing system, which negatively impacted on the customer experience, as it caused check out delays. Further observation show that Internet access was widely available, although the connection was perceived to be slow, and not reliable. A final observation, point to poor physical infrastructure, specifically the roads within the city centre. As such, travelling within the capital, Nairobi, was a very time consuming process. The roads did not support the volume of vehicles and this resulted in traffic congestion throughout the day. A consumer would therefore have to plan their day carefully if they needed to visit their bank, an ATM or stores to purchase goods and services.

5.2 Technological factors affecting retailer’s adoption of mobile technology in Kenya

Three main findings are reported under technological factors: costs, security and convenience. Retailers perceived mobile payments as a cost effective means of conducting transactions. The majority of participants were not concerned with costs associated with mobile payment services and as Interviewee 8 indicates *“I think they (costs) are fair”*. Respondents tended to iterate how the costs were *“reasonable”* (Interviewee 10), *“fair”* and *“for merchants, costs is but small”* (Interviewee 5). Retailers also indicated that they prefer this mobile payment option as it had no costs on the customer, who ultimately drive the market. For example, Interviewee 3 reported that customers that paid with cash, would have to acquire the cash from a bank or ATM. This withdrawal had transaction costs associated with it. *“I think like Lipa Na M-PESA are preferred by customers other than withdrawing cash for a payment. There are cost implications but Lipa Na M-PESA is always free.”*

A technological factor that was also perceived as an advantage of mobile payment, and therefore drove adoption, was the lack of security concerns with respect to the technology. Concerns such as safety of personal data, were perceived to be of less significance when compared to security and risks associated with carrying cash. By removing the cash element from a business, there were less opportunities for criminals to exploit their business as Interviewee 4 indicates: *“Mobile payments will give you much security because for example if you don’t have our guards here and maybe burglars or thieves comes and they will come and look for cash...if you have that cash then they’ll take it and they go. If the customers are paying with the mobiles there is no cash we don’t have the cash here.”* All respondents perceived the platform to be *“hundred percent safe”* (Interviewee 10) and in fact, the high security associated with the mobile payment technology was the main driver towards its adoption as demon-

strated by Interviewee 11 “*Lipa Na M-PESA (we) prefer it more, because you know your money is secure than the cash payment.*” and “*I think security is the great advantage.*” (Interviewee 6).

Finally, the majority of participants noted that mobile payments such as the *Lipa na M-PESA* services were extremely convenient because multiple payments can be processed simultaneously “*so hundred customers can pay at the same time. So it’s very convenient.*” (Interviewee 1). In addition, the convenience is not only brought about by the fact that customers “*don’t need to carry the money in their pockets.*” (Interviewee 3); but by the fact that customers are able to pay for services without being present at the store “*Transactions can be done offsite.*” (Interviewee 10); and also order a product or service online and pay without the use of credit card. However, there were a few respondents who indicated that mobile payments presented a new challenge – that of inconvenience. The Kenyan context was traditionally a cash based economy, and all transactions were paid in cash at the point of purchase. However, the change to mobile payment has made “*individuals not to see the need to have money on them*” (Interview 4). The consequence of this is that when “*you are confronted with a customer who does not work with mobile payment “you lose out”*”; or “*when you want to buy something small like lunch, you also forget that you did not bring money because by default you are thinking in terms of Lipa na M-PESA*” (Interview 4). These views imply that although convenience of mobile payment was perceived positively; it also added a new dimension to the cultural context which was not entirely perceived as positive.

5.3 Organizational factors affecting retailer’s adoption of mobile technology in Kenya

The findings of this study show that the Kenyan retailers, regardless of their size, were mainly aware of, and had adopted one form of mobile payment – the *Lipa na M-PESA*. The service is provided by the country’s largest mobile network operator, Safaricom, which also introduced the very successful M-PESA product. The mobile payment platform was therefore well established in the market and customers and businesses alike trusted the service. Given the strong mark of *Lipa na M-PESA* in the market, respondents were not familiar with other methods of payment such as using smartphones as the point of sales, or smartphones at the point of sale. Interviewee 3 demonstrates his unfamiliarity with these payment methods when other payment examples were cited to him: “*You mentioned 3 categories and in the 3 categories 2 of them are not applicable yet*” because according to Interviewee 9 “*... we can say only the mobile payment platform is known*”. Although there were other mobile payment platforms such as Airtel - the second largest mobile network operator, the majority of respondents indicated affiliation towards Safaricom’s initiatives.

Only one participant, interviewee 5, used a Mobile as Point of Sale mobile method. When respondents were made aware of other mobile payment forms, they strongly indicated that adoption would be dependent on whether the mobile payment form involved a phone –*the one which you tap the PDQ there the phone or Lipa M-PESA*” (Interviewee 6). Interviewee 12 confirmed these findings, but cautioned the need for awareness of the technology if it has to assimilate within the Kenyan market: “*the tap and go would be more convenient but it seems right now it has not been uh...well...adopted.*” Thus, although there was strong awareness of the mobile payment platform, there was limited awareness and usage of other forms of payment methods such as the mobile at point of sales category. The strong advocacy for *Lipa na M-PESA* mobile payment platform was as a result of its perceived compatibility. All participants expressed the ease at which *Lipa na M-PESA* became integrated in their business and how it seamlessly fitted into their business activities.

Thus although mobile payment use in Kenya was extremely high, adoption was limited to the mobile payment platform categorisation which had become synonymous with Safaricom's *Lipa Na M-PESA*. Retailers were unaware of the methods categorised as Mobile as Point of Sale and Mobile at Point of Sale, but they did show a keen interest in Mobile at Point of Sale technology. Retailers anticipated that their customers would adopt this technology if it became more prevalent in the markets, because it was also perceived as being convenient.

5.4 Environmental factors affecting retailer's adoption of mobile technology in Kenya

Environmental factors perceived to be important in the adoption of mobile payment was consumer awareness and adoption, the reliability of the technology which depended highly on the market providers. With regards to consumer awareness and adoption, retailers unanimously agreed that the adoption of mobile payment methods depended on customers because it is "*customers who choose the mode of payment*" (Interviewee 4). Given that this was consistent across all businesses, the implication is that organisation size, location and business category did not play a role in mobile payment adoption, as retailers would support any initiative if it was customer driven. For example, retailers indicated that customers would prefer to shop at stores that supported mobile payments and their first question when they walked into any shop regardless of the size and type of business is "*do you have Lipa Na – MPESA*" (Interviewee 6). This mode of payment was also accepted by government institutions as Interviewee 11 indicates "*they [government] say we Lipa Na M-PESA, we all have to do it*".

Another environmental factor identified in the study was related to mobile network operator service levels. Few of the respondents identified mobile network reliability as a challenge and indicated that degradation in service levels resulted in a bad customer experience and could cause confusion at the transaction checkout stage. Retailers and customers relied on the built in notification services that the mobile payment platform supports. Successful transactions would result in a confirmation SMS sent to both the customer and retailer. When delays were experienced, the customer and retailer would be left in doubt whether a transaction was processed or not. Interviewee 3 felt that the mobile operator was unreliable "*...you can't rely on the networks*". Speed of processing transaction was also an issue as Interviewee 10 noted "*Getting response from the mobile operators.*" Interviewee 1 agreed that delays was indeed a problem "*We have the delays from the provider*" and if this occurs, "*that mean we cannot carry out any transactions.*" [Interviewee 13].

6 Discussion of findings: Institutional theory perspective

The purpose of this study was to examine the Kenyan retailer's perception of mobile payment with the purpose of identifying contextual factors that influence not only mobile payment, but also the choice of selecting a given mobile payment method. Technological factors perceived to be significant were costs, security and convenience. Retailers were aware of the benefits of mobile payments but adoption was limited to the preferred and trusted brand of Lipa Na Mpesa. Not many were ware of other forms of mobile payment such as Point of sale methods. Environmental factors perceived to be market readiness, specifically consumer awareness and adoption of new mobile payment methods. In addition, reliability of ICT infrastructure was deemed important to facilitate adoption of mobile payment.

The findings at the innovation stage, show how retailers perceive mobile payment security, costs and convenience as important constructs for adoption. There is wide lack of awareness of alternative mobile payment methods due to the institutionalised form of payment by Lipa Na Mpesa. There was also

strong positive indication that proximity mobile payment (mobile POS) was desirable although there was minimal discussion surrounding the potential of the technology given that respondents had not witnessed its value in practice. Retailer's adoption of mobile payment technology was strongly dependent on customer's willingness to adopt and use that mobile payment technology. Although retailers trusted their current mobile payment option, there were concerns of mobile network reliability and its associated infrastructure.

The interpretation of the findings in the context of institutional theory show that the Kenyan SME context is at the objectification stage of institutionalisation. Kenyan SMEs appear to have unanimously engaged in the use of mobile payment to conduct any form of transactions. In so doing they have generated new structural payment arrangements in response to previous challenges they encountered such as the lack of security of having cash in the premises of the organization; the lack of tapping into unbanked customers; and the inconvenience of formal banking structures. Security was not perceived as a challenge in this study, and this was contrary to many studies in other context (Al-Jabri and Sohail, 2012; Shin, 2009). The benefits that mobile payments bring, such as operating in a cashless environment, were perceived as improving the security within the organisation. Organisations were therefore adopting mobile payments to improve their security. Findings pertaining to convenience of mobile payment and affordability resonance those in literature such as Shin et al (2014), Chen (2007) and Shin (2009).

The behaviour of SMEs in this study, that of adopting mobile payment to complete a transaction regardless of organizational size, typify Tolbert and Zucker (1996, 181) observation that 'the adoption of a given innovation may and often does occur in close association with adoption processes in other organizations'. The fact that there is a wide spread adoption of mobile payment, and of Lipa Na Mpesa, specifically, show how the Kenyan context has reached the objectification stage of institutionalisation, at which all SMEs, and consumers have widely accepted the use of mobile payment. Given that mobile payments have recently been adopted, it is still premature to theorise that the sedimentation stage has been reached. The authors are however aware that although the Kenyan context exhibits a typical "successful" empirical settings, where mobile payment as an innovation has diffused broadly, it can at the same time "distorts findings" to give the implication that diffusion is only "driven by functional necessity or overall cultural legitimacy" (Colyvas and Jonsson, 2011, 29). The findings did show how a few of the respondents perceived instances where mobile payment was an inconvenience. Such respondents perceive the infiltration of mobile payments to have negatively changed the practices of people who traditionally were a cash oriented economy to that of not having "cash on me", and as such cannot perform certain miniature transactions such as "having lunch at my convenience because I don't have money on me". Future studies needs to investigate the unintended consequences of the wide spread practice of mobile payments, and the potential inclusion of new mobile payment options that could be applicable to the Kenyan context.

7 Conclusion

This study found that mobile payment adoption in SMEs in the retail sector of Kenya had shifted from a simple initiation to a more normative base. However, one specific form of mobile payment stands out – that of Mobile P2P. There was no awareness of other forms of payment such as Mobile as Point of Sale and Mobile at Point of Sale. However, those that were made aware of these methods did show a keen interest in Mobile at Point of Sale technology. They however cautioned the need to have customers adopt the technology first since retailer adoption is "driven by customers". These findings point to the widely accepted structural payment amongst the Kenyan SME sector. There was no indication that government regulations and associated normalities were factors that were hindrances to mobile payment. Issues of infrastructure and network reliability were however noted. The study also notes the unintended consequences brought about by mobile payments and calls for future studies to explore these consequences. Although institutional theory was used as a lens to explain the findings,

the theoretical lens was not used in the early stages of the study. A relook of how institutional theory informs the empirical investigation, specifically for the Kenya context specifically is necessary and will form part of future work.

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