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## Financial Technologies: A Note on Mobile Payment

### Abstract

The financial market is currently disrupted by the rise of new technologies “FinTech” a short form for financial technology, which profoundly reshapes the financial intermediary structure and makes financial services more efficient. Mobile technology with Internet-enabled devices is the next logical phase of the World Wide Web campaign such as mobile phone taking over the mass market and will fundamentally change the way products are bought and sold as well as financial services especially the mobile payment system. This research examines changes payment method in financial services, particularly those involving mobile payments that can create new channels for consumers to purchase goods and services using a mobile phone. Mobile payment application is ready to replace traditional cash, checks, credit and debit card throughout the country. In this stage of development, the current situation of mobile payment market, review the previous literature on mobile payment services, analysis use of mobile payment worldwide and various initiatives use mobile phones to offer financial services for those ‘unbanked’.

**Keywords:** Financial Technology; Financial Intermediation; Microfinancing Service; Mobile Payment

**JEL Classification:** G20; O14

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### Abstrak

*Pasar keuangan saat ini terganggu oleh munculnya teknologi baru “FinTech” kependekkan dari Financial Technology, yang secara mendalam membentuk kembali struktur perantara keuangan dan membuat layanan keuangan lebih efisien. Teknologi mobile dengan perangkat yang mendukung internet adalah fase logis berikutnya dari kampanye world wide web seperti ponsel mengambil alih pasar massal dan secara fundamental akan mengubah cara produk dibeli dan dijual serta layanan keuangan terutama sistem pembayaran mobile. Penelitian ini menguji perubahan metode pembayaran dalam layanan keuangan, terutama yang menyangkut mobile payment yang bisa membuat saluran baru bagi konsumen untuk membeli barang dan jasa dengan menggunakan ponsel. Aplikasi mobile payment siap mengganti uang tunai tradisional, cek, kartu kredit, dan debit di seluruh negeri. Dalam tahap penelitian ini, dilakukan dengan meninjau situasi pasar pembayaran mobile saat ini, meninjau literatur sebelumnya tentang layanan pembayaran mobile, analisis menggunakan pembayaran mobile di seluruh dunia dan berbagai inisiatif menggunakan telepon genggam untuk menawarkan layanan keuangan bagi mereka yang tidak memiliki izin.*

**Kata kunci:** Teknologi Keuangan; Perantara Keuangan; Layanan Keuangan Mikro; Mobile Payment

The financial market has been disrupted by the rise of new technologies “FinTech” a short form for financial technology, which profoundly reshape the financial intermediary structure and make financial services more efficient (McAuley, 2014). Currently the FinTech is spread across value chain and financial markets. FinTech is a positive development of the financial industry. It can provide consumers with better product efficiency and lower prices. It has the potential to support financial inclusion as well.

FinTech increasing integrated into new areas by innovation. For instance, the development of instant payment infrastructure can help develop new markets for mobile payment solutions, which may become new payment standards in certain areas. It introduces standard processes and new working methods.

Moreover, it targets to enhance the customer experience and improving process efficiency at traditional financial system while redesigning traditional services to develop greater personalization, transparency and able to access through digital channels as well as provide alternatives to traditional services. Therefore, FinTech wish to skip intermediaries and take benefit of other technologies and features likes Smartphone. For example, use of phone camera, barcodes or QR codes. The user can choose to scan a code for the following: view availability and product price compares it with other stores then order and pay.

Fintech is promoting innovation and creating new business models based on social networking services, mobile devices, credit ratings, mobile messaging, credit cards and bank accounts. Mobile payment is expected to be an important platform for financial transactions especially the widespread use of mobile devices and user needs for timely payment and convenience.

New delivery channels and services bring potential advantage to consumers, for instance access to payment services in a simpler, faster and convenient way as well as provide payment services

at a lower price. Moreover, payment service providers (PSP) are not within their jurisdiction allowing consumers to cross-border transactions. The number of mobile payment services has increased and offer more functional options available around the world. In developing countries, mobile payment services are an important tool for financial inclusion especially for people who are unbanked and cross-border flows of funds such as remittances. On the other hands, in developed economies, the new generation has the power to quickly adopt new digital payment services. The increasing use of these payments by development of e-commerce.

Firstly, often there will be confusion between about mobile banking and mobile payment. This is because financial transactions can be carried out through mobile phones for a variety purposes and close interrelationships (Mobey Forum, 2011). Mobile banking usually is defined as mobile phone access to banking functions, similar to what banks have already provided through the Internet. It is a service channel for mobile banking after banking counters, self-service banks, telephone banking and online banking, for example users can view their balance and transaction history or do transferring money to other account via mobile phone (Zhou, 2011).

On other hand, mobile payment is defined as mobile phones used to transfer funds in exchange for goods or services. Moreover, mobile payments also known as mobile wallet and mobile money which usually refer to payments method or services operated under financial regulation through mobile devices such as smart phone or mobile phone. Consumers do not have to pay by cash, credit card or check, but use mobile phone to pay bills, goods and services through wireless or communication technologies (Dahlberg et al., 2008). Users can use the mobile device to complete the goods payment business anytime, anywhere, its security, convenience, simple operation, personal service, multi-functional, low cost, wide coverage and free from time and space constraints and other characteristics.

Mobile devices can be used in multiple of payment schemes such as airfare, transport fee, even digital content likes music, games logos or news can use electronic payment services to pay invoices or bills (Dahlberg et al., 2008). Payment for physical goods can also be done at ticketing and vending machines as well as manned point-of-sale terminals. When make a mobile payment, user can use mobile device to connect server to perform authentication and authorization to get confirmation of completed transaction (Antovski & Gusev, 2003).

The mobile payment service is a value-added service in mobile data application built on mobile operator support system by mobile application service providers (MASP), mobile operators and financial institutions (Carr, 2007). The mobile payment system will create a payment account associated with its mobile number for each mobile user, which is equivalent to an electronic wallet that provides mobile users with a way to pay and authenticate payments through mobile phones. The user can use short text messages (SMS) or use Wireless Application Protocol (WAP) function to access mobile payment system, the mobile payment system will send transaction request to the MASP, MASP to determine the amount of the transaction, and through the mobile payment system to inform the user (Carr, 2007). The payment method can achieve through multiple way such as money transfer, phone bills, and internet banking payment or direct debit assignments (Dahlberg et al., 2008).

### **METHODS**

This paper reviews the status of mobile payments by reviewing the literature and analyzing the case examples of M-Pesa, Ali Pay, and Apple Pay. In the literature, for mobile payment classification, according to different dimensions can be divided into two categories which is remote payment and proximity payment. These two types of mobile payment service model are affected different aspects of markets, technology, business model and pay-

ment methods between consumer and merchant (Goeke & Pousttchi, 2010).

### **Remote Payment**

Remote payment also known as online payment refers the payer does not direct interaction with the merchant's point of sale (POS) system. The transaction through telecommunications networks for example 3G, internet or GSM and other. The most of the technologies that support remote payment consist of unstructured supplementary service data (USSD), short message service (SMS), associated general purpose integrated circuit (UICC), interactive voice response (IVR) and wireless application protocol (WAP) (ISACA, 2011). Remote payments involve payments made through mobile web browsers or resident software applications where the mobile phone is used as a device for authenticating remote storage of personal information (ISACA, 2011). Moreover, Mobey Forum (2011) mentioned that the transfer or sending money to another individual or country can constitute as an enormous market for remote payment especially in the developing countries such as China, India, Philippines, and Mexico. In addition, remote payments through of software applications or mobile browsers are typically used for purchase online goods and services. Currently, the fastest growing area of mobile payment is purchase applications (App), music and games (Englund & Turesson, 2012).

### **Proximity Payment**

Proximity payment is defined as transaction interacts directly with a physical merchant's Point of Sale (POS) or mobile POS devices that consumers use to pay for goods or services through contactless payment. Proximity payments can use in two POS locations i.e., stores and vending machine. Proximity payments can rely on the loop payment infrastructure or financial industry payment infrastructure for example: merchant can use Near-field Com-

munication (NFC) technology and barcode to achieve the contactless payment. In addition, Shen & Yazdanifard (2015) mentioned there are few types of mobile payment: mobile network payments (WAP), carrier billing payments, SMS-based transfer payments and contactless payments (NFC). NFC a compatible and dedicated payment terminal is most generally used by merchant to receive the payment from consumer, and the consumer just needs to hover or wave the NFC. The compatible mobile devices over a contactless NFC reader thus complete the payment. Another way to say, mobile device become a contactless payment card thus making a new way of payment and to bring convenience for consumer to make ‘wave/tap and go’ transaction (Lai & Chuah, 2010).

In the Figure 1 shows the different types of mobile payment option depending on type of payment-remote or proximity and whether the process payment is between person to person (P2P) or between merchant and consumer (B2C/C2B). B2C/C2B mobile payment solutions rely on either a bank-centric business or mobile operator-centric model. P2P mobile payment is a private transaction between two users. The most commonly used for transaction are funds transfer to domestic or oversea country.

	B2C/C2B	P2P
RE M O TE	M-commerce Mobile bill payments	P2P payment Domestic Transfer
PR OX IM IT Y	Mobile Wallets, Mobile as a point of sale	

**Figure 1.** Types of Mobile Payment Services  
Source: The Mobile Money Revolution- May 2013

Mobile payment services providers as a key role in ecosystems. This included market participants such as merchant, device manufacturers, financial institutions and regulators as well as affects other market factors such as network, consumer technology, banking, legislation and use habits in payment instrument may influence services providers and other market participants (Dahlberg, Guo, & Ondrus, 2015).

With the current rapid development of mobile phone, mobile payment is likely to change the pattern of financial transactions. Yang et al. (2012) stated that mobile payment is one of the main drivers of mobile commerce, because mobile commerce makes the transactions convenient and feasible.

In the past few decades, the role of banknote has significant changes. Mallat, Rossi, & Tuunainen (2004) pointed out the mobile payment can be used as a cash substitute at retail point of sale (POS) terminals. It is not relevant to the present unit value of the actual unit, but is increasingly used as a tool for evaluation goods and services (Khan & Craig-Lees, 2009).

Mallatt (2007) stated that mobile payments become viable due to mobile Internet and commercial availability. Moreover, mobile payment defines as a process involved both parties exchange financial values using mobile device in return for goods and services (Gódoret et al., 2009).

**Why Mobile Payment is A Trend?**

According to Dennehy & Sammon (2015), the trend in mobile payments was through the future research projects generated by the emergent body of knowledge. Stakeholder participation in the delivery and design of the mobile payment system will achieve the potential for mobile payment systems and such systems will become a reality through the widespread adoption.

A business ecosystem represents the interaction between several stakeholders from multiple



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industries included merchants, consumers, financial institutions, mobile network operators (MNO), mobile device manufactures, technology, software providers and regulations to deliver a mobile payment system (Dahlberg et al., 2008; Contini et al., 2011; Lu et al., 2011).

Use of a mobile phone has become an integral part of our daily lives. Early mobile phone only used to make voice calls and send text messages (Chatterjee, 2014). With the rapid development of technology, Smartphone today have evolved to wide range of services that provide users a daily need such as instant message, email, camera, video, navigation, internet access, etc. In short, Smartphone has integrated became a pocket size PC.

### Rise in Global Smartphone Penetration

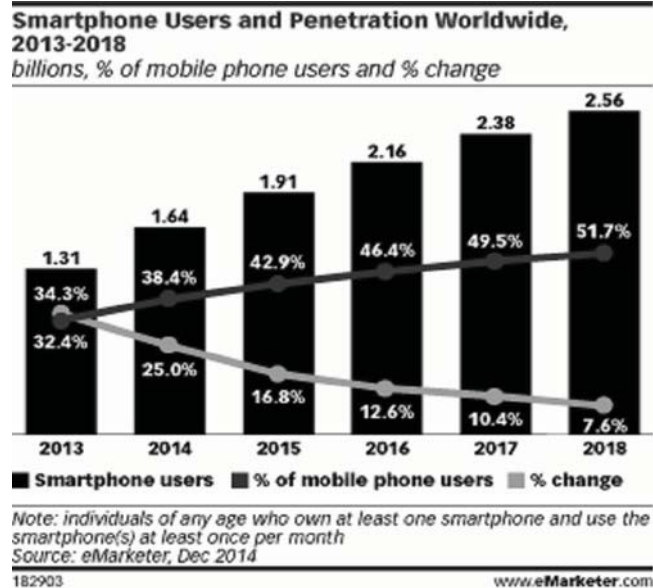
Smartphones are becoming trendier across the world. A growth number of consumers who must use mobile phones now prefer to buy smartphones over a feature phones. This is why Smartphone penetration is growing worldwide tremendously.

In emerging markets, economical Smartphone are open up new opportunities for merchant and marketing to provide consumers who previously unable to access the Internet. At the same time, in established and mature markets, Smartphones are rapidly transforming the paradigm for consumer media usage and emphasizing the need for marketer to be mobile-centric.

Furthermore, the mobile user forecast for countries in Central and Eastern Europe, Latin America, and Southeast Asia in Figure 2 shown the number of smartphone user worldwide will exceed 2.38 billion in year 2017 (eMarketer, 2014). Moreover, according to eMarketer (2014), the global smartphone users will be more than 2.56 billion, this figure will increase by 7.6% in year 2018 and close to 2.56 billion.

In year 2014, more than a quarter of the world's population uses smartphones. In addition, eMarketer

(2014) estimates there will exceed 2.56 billion people or a third of the world's population use Smartphone. Therefore, users able connect to digital information around the world through Smartphone and other mobile devices in anytime and anywhere.



**Figure 2.** Smartphone Users and Penetration Worldwide, 2013-2018

Source: eMarketer, Dec 2014

### Growth of Information and Communication Technology (ICT)

Information and communication technology (ICT) is the key to continually advance technologies in all areas and improving efficiency thus resulting in growth potential in value creation networks and existing markets (Dapp, 2011). The Internet provides a multiple platform for collaboration or participation in the interaction process, multimedia communication tools, social platforms for sharing and evaluating content. Through the appropriate social platform and new communication channels, the interaction of customers in the process of corporate innovation is important even for traditional bank to establish trust and close relationship with customers.

ICT penetrates into many different industries and responsible grow in revenue and production (Basu & Ferald, 2008). Chin & Fairlie (2007) stated that the Networks are the key in increasing the global penetration of internet and computer. Moreover, many studies mentioned the positive impact by adopting of ICT for example, economic productivity, sustainable development, poverty alleviation, etc. (Madon, 2000; Walsham, 2001; Puri, 2007).

ICT is becoming more efficiency, productive and low cost. Advances technology are produce powerful devices to build a virtual network that let user to communication and share information with each other around the world. Coyle (2009) stated that the technology innovation is encouraging a trend of digitization towards the world of information and knowledge thus become has been integrated into the modern global community, serving a wide range of functions and purposes.

With the growth in ICT, there is how the users realize the importance of convergence can shape information transmission and service delivery. This refers the convergence of information technology such as computers and telecommunications leading to the climax of the digital revolution where all types of information such as voice, data video access on the Internet (Coyle, 2009). The creation and adoption of Smartphone such as the iPhone, Blackberry is a key paradigm for convergence one device has different applications and multiple features to bringing technology likes traditional cellular phone services, email, social networking, and video recording.

### Rise in Multichannel Retailing

Technology today is changing the way in which merchant and consumers interact as well as providing incredible range of options. Multichannel shopping channel create new source of value for merchant (Burke, 2002). Over the past few years, online retailers have growth higher sales than traditional retailers due to trend of consumer increas-

ingly shifting from traditional retail shop to multi-channel retailing (Schoenbachler & Gordon, 2002).

Given consumer a cross-channel interaction with products or services, online sales are no longer restricted to an e-commerce website, it covers purchase from website, mail orders, social media, mobile applications, live web chats, interactive television and comparison shopping sites.

The growing share of e-commerce in retail sales also means the need for efficient and effective payment infrastructure. In addition, mobile devices increase will lead to more users to use of mobile services and at the same time making purchase.

Commonly, merchant that successfully integrates mobile elements into multi-channel strategies and synchronize their online and offline distribution channels may attractive to consumers in future. Which will lead to media consumption and shopping habits continue to evolve further. This also applies to mobile financial services to offer more choice and convenience to consumer.

In addition, mobile phones are becoming ubiquitous in today's society, and wireless providers are actively working to promote the development of new mobile business services.

### DISCUSSION

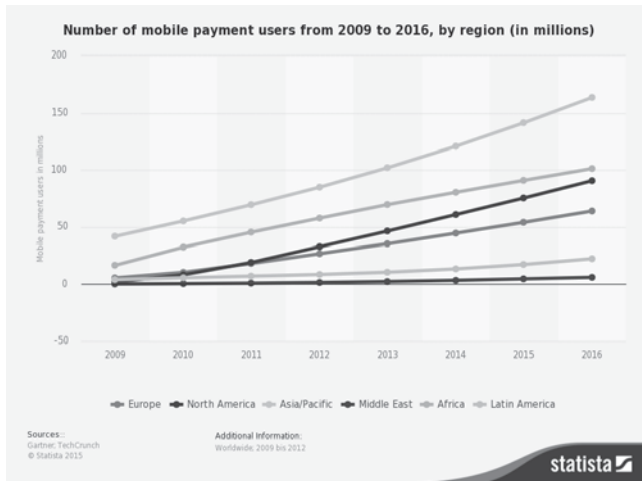
Mobile payments have grown rapidly therefore many companies entering advanced technology industry to offer mobile payment solutions, including financial institutions and credit card companies, Internet service companies, mobile communications service operators, major communications network infrastructure providers for consumer to allow them to pay or transfer money using mobile phones. Mobile payments have been defined, classify and discussed according to their technology and functional preferences. This section is intended to provide a brief overview of the mobile payment infrastructure and adoption in market differentiation and decentralization of the world market.

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In Figure 3, consumers in the Asia Pacific region and Africa often using mobile payment and the rest of the world is catching up. Asia Pacific has been a leader in mobile adoption especially in **mobile e-commerce** due to rapid growth with Internet services and larger mobile applications, is exacerbating the competitive landscape where large local companies are gaining market share by improving logistics and mobile platforms.

The next is Africa region adoption in mobile payment as people living there are largely unbanked and low income thus financial inclusion via mobile payment able to send money to their families in rural areas.



**Figure 3.** Number of Mobile Payment User from 2009 To 2016  
Source: Gartner, TechCrunch @ Statista, 2015

### M-Pesa in Kenya

In early 2007, Safaricom as part of the Vodafone group, the largest mobile network operators in Kenya was launched a successful implementation of a mobile phone based on money transfer service. The product is called M-Pesa as 'M' is stand for mobile and 'Pesa' in Swahili means money. M-Pesa allows users to withdraw, deposit, transfer money or pay goods and services easily through mobile device. The service has grown rapidly since

its launch and is now being used by more than 25 million users (Vodafone, 2016).

M-Pesa, Kenya mobile payment system represents standard for innovation of financial services. The mobile phone technology tailored for Kenya society has been widespread, where many people felt that a formal bank account cannot be achieved. M-Pesa shapes an environment even the most of the poorest residents of a remote area such as African villages are able to do finance inclusion. The collaboration between Vodafone mobile phone and local service provider Safaricom, M-Pesa has been everywhere in the daily life of East African countries. All the needed for users is just a mobile phone and now every household able to obtain the technology (Jack & Suri, 2011). The scenario is the user using pre-loaded data such as purchase airtimes credit on the SIM card, M-Pesa uses the SMS-based interface to transfer credit to other users. Therefore, even without any internet access the user still able to send money through SMS.

In order to load money into an account, customers can request the local agents of Safaricom to exchange money for e-float or e-money and deposit into their account automatically. Therefore, the users can use E-float to transfer money to another M-Pesa account via SMS technology or sold back to agent of Safaricom for exchange in money (Jack & Suri, 2011). M-Pesa is benefit for users to transfer the money to anywhere anyone as long as who owns the mobile phone. This has changed dramatically in how Kenyan manages money and payments. The M-Pesa is built around low price, security and convenience (Mas and Radcliffe, 2010). M-Pesa reveals effective mobile services can provide new opportunities and reduce risks for the risks that traditional financial products and services are understood by residents in developed countries. Thus, it represents a revolution in financial inclusion.

In short, M-Pesa transfer money easily across urban and rural populations. Before M-Pesa people

will personally deliver money to family and friends. M-Pesa able to save time, money and deliver the money safely to the intended payee, rather than through the middleman who may not always deliver the money to the prospective person. It is important that M-Pesa able to send and receive payments through these channels by accessing a safe and secure channel for a resident without a bank account which is call 'unbanked' (Hughes and Lonie, 2007).

### Alipay in China

Mobile payment has subverted traditional payment method such as dealing with cash due to rapid development of mobile devices services and 3G /4G network technology. Alipay is a third-party online payment solution and owned by Alibaba group was launched in china in 2004. Alipay is a biggest e-commerce company in china.

Alipay has been called east of PayPal in China. In fact, Alipay and Paypal are similar which they allow their user to link to debit /credit card or other alternative payment method to a virtual e-wallet therefore the users can use e-wallet transfer money immediately to other or buy goods and services with merchants who have Alipay account (Taobao.com, 2015).

Alipay can support cross-border online payments. This feature allows Alipay users to use Alipay to purchase goods and service on merchant's website or apps. During the period of purchase, Alipay is able to deduct the amount from the user's Alipay account in Chinese Yuan and pay the payment to the merchant in different foreign currency according to the website or application shows. This feature is conducive for foreign merchant to attract Alipay users, more specifically to attract Chinese customers in China.

Indeed, Alipay not only an online payment services but a coordinator between seller and buyer through online transactions. Alipay will intervene

as a middleman to effectively resolve the conflict between seller and buyer if there is a dispute when buying and selling (Taobao.com, 2015). As a result, Alipay now is wide variety of e-shopping platforms such as Taobao, Tmall, Alibaba, and the Ebay of China. The growing independent online stores and increasing quickly of foreign retailers and wholesalers (China SEO Shifu, 2014)

Moreover, Alipay let the user to conduct a wide range of personal or family bills and daily affairs such as water, electrical bill, airtime top up service, utilities fees payment and investment via their mobile phone, PCs, or Tablets. Beside this, Alipay integrates Alipay Wallet corporate with medical center booking and payment system thus making it easier for users to easily use their mobile devices to book the required medical appointments at home. In addition, users can pay for medical expenses and receive diagnostic results through the Alipay application (MelanieLee, 2014).

### Apple Pay

Apple Inc. had launched out a payment service called Apple Pay- a mobile payment and digital wallet that allows users make payment in IOS apps, in person or website. Users just add the payment card to the services either through iTunes accounts, use camera to take photo of the card or manually entering card information.

User can make payment using latest Apple's series product such as Apple watch, iPhone or iPad. It digitizes and replace a stripe transaction using debit or credit card chip and PIN at a contactless point of sale terminal. Therefore, Apple Pay able to use existing contactless terminals and does not need Apple Pay specific contactless payment terminal to make a payment.

In addition, Apple Pay is using Touch ID as a biometric security to ensure the user pays their payments with safe and secure (Sacco, 2014). To ensure transaction secure, Apple Pay uses a method



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'Tokenization' which replaces actual payment card numbers with one-time numbers to prevent user's credit / debit card number expose to other when using NFC to transmit data. Moreover, during the checkout, iPhone users does not require personal identification number (PIN) code to verify, they can choose either put their phone on the NFC terminal or scan their fingerprint onto the phone's fingerprint sensor to verify the payment.

Beside the iPhone, Apple Watch need a double-click payments button and just the wrist near the contactless reader are required. In order to activate the payment function, users must enter a code each time they strap the watch.

According to the World Bank's 2014 has around 2 billion adult remain unbanked. South Asia and East Asia are account for more than half of the world's bank unbanked adults. In Figure 4, adult without bank account in South Asia has about 31 percent out the global total and East Asia account 24 percent. The highest percentage of unbanked population in two regions is because of the three most populous countries in the developing world - China, India and Indonesia (Demirgüç-Kunt et al., 2015).

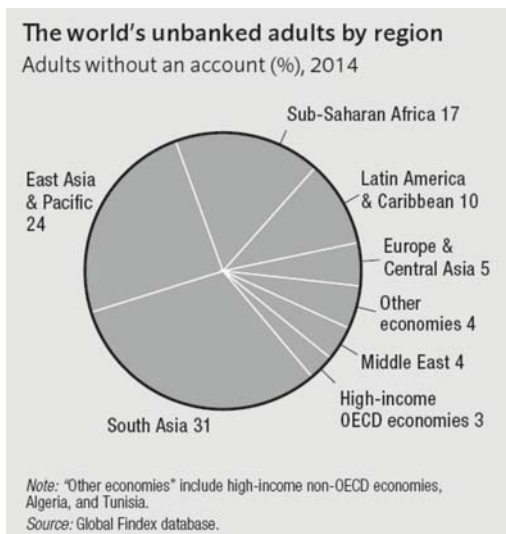


Figure 4. The World's Unbanked Adults by Region 2014

Source: Global Findex database

Unbanked define as an adult who do not have an account at bank or access to banking services for their financial transactions. There are some reasons of unbanked: poor credit history from a prior banking relationship, high bank fees, hard to meet the bank account requirement due to unstable and limited income as well as distrust the banking system. In short, the most general group of unbanked consists of low-income individual or families, young adults, lower education, households headed by women and immigrants.

However, since bank infrastructure is not common in many developing regions of the world thus they have no other reason to go to bank accounts. Moreover, bank branches and automatic teller machines (ATM) are only can find in cities or large towns area so it is inconvenience in daily use.

This means that many unbanked adults have no proper financial institution, for instant can't send or receive money from oversea, unable to borrow money and have nowhere to keep their money safely therefore they have to rely on cash and pay an excessive cost on local alternative financial services for example, money orders, money transfer services such as western union and pawn shop to exchange money for their valuable possessions which are typically unsafe, expensive and inconvenient.

The traditional "bricks and mortar" banking infrastructure is hard to make the business model to serve customer who are low income or unstable income, especially in rural areas. However, more than billions of these people able to use their mobile phones to do financial services without necessary to open a bank account. Various initiatives use of mobile phone provides a basis for extending the coverage of financial services include transfer, payments, saving, insurance, and credit. Therefore, mobile technology has been a gospel for these unbanked.

Mobile payments will allow customers who do not have bank accounts to transfer and receive money quickly. Moreover, people can access their

money anytime and anywhere instead of having to handle the payment within the standard business operating hours. Therefore, it is very convenient. Furthermore, Mobile payment technology eliminates the need for direct access to credit unions or banks thus the costs are much lower than other remittance options. Mobile payment technology can incorporate financial revenues into the economy, while microfinance institutions can provide more competitive lending rates for users who use cash transactions to reduce costs.

Mobile network operators and payment platforms have a far-reaching impact on the connection between global banking and unbanked, compared to traditional financial services as a bank agent. For example, 25 million people use the M-Pesa mobile payment platform to send money via SMS in Kenya.

In addition, with the migrant workers' growth globally to lead increase in remittance, the private firm has reacted to payment services such as bank and other financial institutions, Western Union and MoneyGram as a transfer operator, mobile phone operators, as well as payment card providers such as Visa and MasterCard (Orozco, 2004; Orozco, Burgess, & Romei, 2010). Therefore, mobile payment service in remittance may have a particularly significant impact on reducing the cost in rural areas. Mostly the domestic remittances from the urban to rural areas are lesser financial institutions operate. Using the postal network, mobile payment providers and microfinance branches, it is possible to provide unbanked rural residents with saving services and formal payment a beyond traditional brick-and-mortar bank branches.

In this aspect of mobile payment growth, person to person (P2P) transfer stand out mainly due to remittance from domestic and international. The number of foreign worker from emerging markets is growing and the scale is expanding. Therefore, using mobile payment to transfer remittances is much cheaper than using services like MoneyGram and Western Union.

With the popularity of mobile phones throughout the world there has been increasing focus on the potential use of making payment. In developing country, adoption of mobile payment is particularly prominent in advanced economies. These systems can provide significant benefits in some countries such as M-Pesa- a success mobile payment in Africa.

The growth of the mobile payment industry can be measured by the number of payment transactions delivered each year especially the use of mobile payment in emerging countries is booming.

Moreover, the use of mobile devices to pay for products or services is attractive to modern consumers because of its quickness, simplicity and convenience. Web related companies i.e. Amazon, Taobao, Alibaba were going to be a driving factor in the future of mobile payment growth as consumer purchase anything through mobile phone. With trends revealing the industry is expanding, global payment leaders which players were most likely to drive the growth in global mobile payments in the future.

## CONCLUSION

Today, mobile payment services in the economy and society can create the value is surprising - Africa's M-Pesa, Apple Pay in United States, China's Alipay and so on. New infrastructure capabilities, expanding service capabilities and innovative technology components are creating value by the organizations that are deploying the technologies and systems. Therefore, consumers make purchase transaction become faster, cheaper and convenience.

Mobile payments could offer a cheaper and more convenient way for user to manage their money, especially nearly 2 billion adults who do not have any bank accounts. This technology provides these consumers with widen option such as depositing funds, making payments, transfer money, tracking transaction

To ensure that mobile payments really “take off”, a path of view of the role in cooperation, market competition and regulation to better understanding of mobile payments move forward in new ways that technology innovators, investors, consumers

and regulators because as money we know it today will soon be handled by electronic devices in the future. In addition, this trend should welcome for economic and social development to benefit and bring advantage to large section of public.

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