



# MOBILE BANKING AS A CHANNEL OF FINANCIAL INCLUSION AN URBAN CASE STUDY

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## 1. Introduction

Changing customer preferences coupled with rapid and continuous advancement of technology has prompted financial institutions to opt for alternate distribution channels in place of traditional brick and mortar branches. In pursuit of such objectives, financial institutions globally have placed heavy emphasis on cost effectiveness, efficiency and seamless service and the optimal mobilization of existing resources and infrastructure.

In the above backdrop, adoption of mobile technology has emerged to be a winning formula as a cost effective and efficient distribution channel of financial products and services. Experiences of several developing countries have shown that the poor majority are in need of a wide range of financial services that could potentially be delivered via mobile phones or mobile phone operators. Safaricom's M-PESA in Kenya, Globe Telecom's GCash in the Philippines, WIZZIT in South Africa and the Grameen Village Phone Program in Bangladesh are some of the successful mobile banking initiatives adopted in developing countries for the benefit of the poor. Empirical evidence from these countries proves that mobile phones have the ability to offer a low-cost, accessible transaction platform for the unbanked poor.<sup>i</sup> Microfinance clients in these countries, for example, use their mobile phones to repay their loans to microfinance institutions as also to receive remittances from abroad. Thus, mobile phones provide financial facilities to the poor living in remote rural areas that do not have access to conventional banking facilities.

High penetration of mobile phones (116.7 mobile phones for every 100 people as at end December 2015)<sup>ii</sup> undoubtedly makes Sri Lanka a ripe market for adoption of mobile technology for distribution of financial services. Further updates made to the Banking regulations in 2011 permitting custodian managed mobile wallets/payments have produced results with the mobile operator driven mobile wallet products. For instance, it is reported that within 100 days a leading mobile operator recorded activation of 750,000 mobile wallets transacting Rs 10.3 million daily in utility payments, cash in/ out and person to person transfers.<sup>iii</sup> Despite the heavy penetration of mobile devices and tech savvy population, the real fruits of mobile technology is yet to be reaped



particularly in connection with making financial services accessible for those at the bottom of the pyramid as a convenient and a cost effective means in the conduct of their day to day transactions. Although most commercial banks in Sri Lanka have already embarked on a journey to optimize the benefits of mobile technology as the core of their multichannel strategies, mobile technology is yet to make any significant strides towards achieving the national goals of financial inclusion despite the fact that Sri Lanka has made remarkable progress in reducing overall poverty and providing high access to finance relative to other countries in the region. According to Getting Finance in South Asia 2010 Report, the overall access to finance in Sri Lanka for individuals/households is the highest when compared with other countries in the region. <sup>iv</sup>

## 2. Objectives and rationale

In the above backdrop, the objective of this article is to explore the potential of using mobile banking as an alternate banking channel amongst the marginalized yet economically active urban micro entrepreneurs in the city of Colombo so as to smoothen their economic activities. In the attainment of the above objective, the paper addresses the following;

- The concept of financial inclusion and the impediments faced by those at the bottom of the pyramid in accessing formal financial sector
- The evolution of the mobile banking and the potential for mobile banking in Sri Lanka
- The profile of the survey sample and the rationale for the selection
- The findings of the survey , limitations, concerns and issues stemming out of the study
- The recommendations and conclusions aimed at optimizing the adoption of mobile banking channel as a tool of financial inclusion.

It is expected that this study will provide new insights into innovative banking technologies, and help the stakeholders in the financial industry to take the necessary steps forward.

## 3. Finance for all

Financial authorities in most developing and transitional economies have placed much emphasis in the past decade on making formal financial services accessible to those in the bottom of the pyramid. The concept of financial inclusion has been a much publicized and promoted topic mandatorily written into the national economic policies and budgets and Sri Lanka is no exception. Financial exclusion (or conversely, financial inclusion) is defined in the literature in a wider context of 'social exclusion' in a society.

The CGAP Guidelines refer to " Financial inclusion "as the state in which all working age adults have effective access to credit, savings, payments and insurance from formal service providers <sup>v</sup> In many developing countries and transitional economies, this includes a large number of households that are not considered poor or low income by local standards, as well as most small and medium



sized enterprises at least with respect to access to credit. From among the pioneering writings on the subject, Leyshon & Thrift (1995) <sup>vi</sup>define financial exclusion as referring to those “processes that serve to prevent certain social groups and individuals from gaining access to the financial system.” Sinclair (2001) states that “financial exclusion means the inability to access necessary financial services in an appropriate form .Exclusion can come about as a result of problems with access, conditions, prices, marketing or self-exclusion in response to negative experiences or perceptions.” Carbo et al. (2005) define financial exclusion “as broadly the inability (however occasioned) of some societal groups to access the financial system.”<sup>vii</sup>

Invariable exclusion of a segment of population (particularly those at the bottom of the socio-economic pyramid from formal financial services is a common characteristic in both developed and developing countries .These segments are thus compelled to rely on informal channels such as moneylenders and shopkeepers for their day to day financial needs, which are usually provided at exorbitant interest rates and other charges leading to a vicious circle of poverty.

Common factors which constraint marginalized segments in accessing formal financial systems include inter alia; high cost of financial services (such as minimum deposit requirement to open a bank account, fees and charges in transfer of money domestically and internationally) which may deter the poor from accessing them. In addition, there may be non-price barriers (such as documentary proof regarding a person’s identity and income, collateral for loans and distance to service providers) behavioral aspects which may also hinder the ability of the poor to access formal financial institutions. Specifically, the poor and less-privileged people are not comfortable with the use of the English language in communication and complicated documentary procedures adopted by formal financial institutions.

Formal financial service providers are generally reluctant to conduct business with those at the bottom of the socio economic pyramid for a multitude of reasons:

- (a) Evidence of permanent residency
- (b) Lack of accountability
- (c) Low financial literacy
- (d) Poor repayment history
- (e) Political patronage
- (f) Instability in income generation trends
- (g) Unavailability of business records
- (h) Lack of traditional collateral to mortgage against credit
- (i) High cost in view of granularity in size and tenor
- (j) Socio-economic and cultural barriers such as education and language constraints.



In the above circumstances, it is evident that new avenues need to be explored to address some (if not all) of the above to accommodate and encourage the unbanked and under banked to have access to a modern financial system.

## 4. Evolution & potential for mobile banking in Sri Lanka

### 4.1 Evolution

Branchless banking or the delivery of financial services outside the conventional bank branches; using third parties such as retailers as the principal interface with the customers and reliance on technology to transmit transaction details is not new. Automatic Teller Machines (ATMs) and POS devices in retail outlets have been available for decades. But the use of branchless banking by people who have not been served by the traditional banking channels is relatively new as are some of the actors involved such as the mobile phone network operators.

The extensive usage of technology such as mobile phones and smartcard readers undoubtedly holds the promise of significantly expanding financial access to many customers who are presently unbanked or under banked by radically lowering transaction costs whilst improving convenience to the customer since it uses existing infrastructure (such as mobile phones and retail stores) and agents networks .<sup>viii</sup>

In common with many other developing countries, Sri Lanka has experienced a phenomenal growth in telecommunication services during the last decade. <sup>ix</sup>The statistical overview of the telecommunication sector as at end March 2016 set out in the Table below aptly illustrates the current penetration.

*Table 1: Statistical overview of the telecommunication sector as at end March 2016\**

<b>Number of System Licences</b>	<b>37</b>
Total number of Fixed phones	2,604,222*
Tele density (Fixed Phones per 100 inhabitants) – 2015 Dec	12.4
Number of Cellular Mobile Subscribers (90 days)	24,568,745*
Mobile Subscription per 100 people – 2015 Dec	116.7
Internet & Email Subscribers – Fixed	718,168*
Fixed Narrowband subscribers	9,182*
Fixed Broadband subscribers	708,986*
Internet & Email Broadband Subscribers (Mobile )	3,484,079*

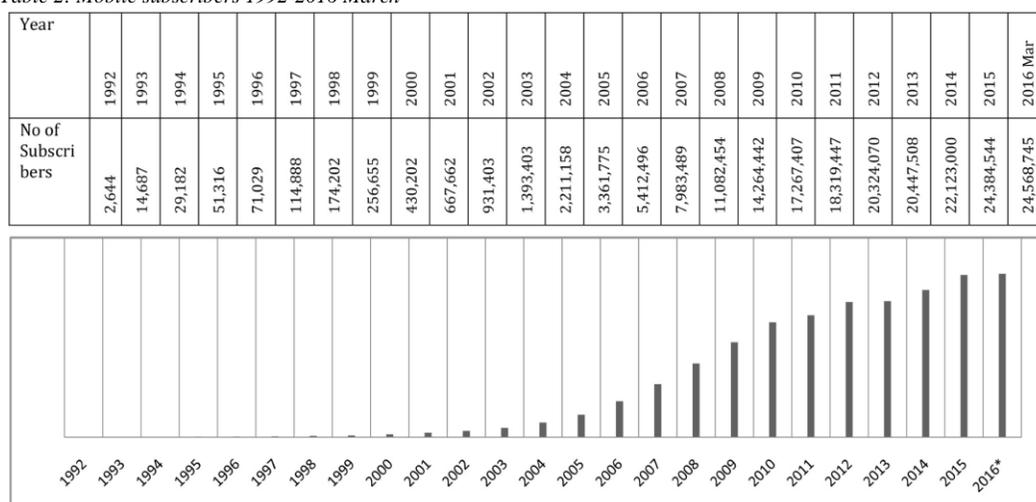


Number of Public Pay Phone Booths	5,705*
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\* Provisional

As amply illustrated in the Table below, the expansion of the use of mobile phones in Sri Lanka over the last two decades has been remarkable. The number of mobile phone subscribers has increased from 71,029 in 1996 to almost 24.5 million by 1st Quarter 2016. This implies that mobile subscription per 100 people as at end December recorded 116.7 thus bearing ample evidence that there is tremendous potential to popularize mobile banking in Sri Lanka.

Table 2: Mobile subscribers 1992-2016 March<sup>xi</sup>

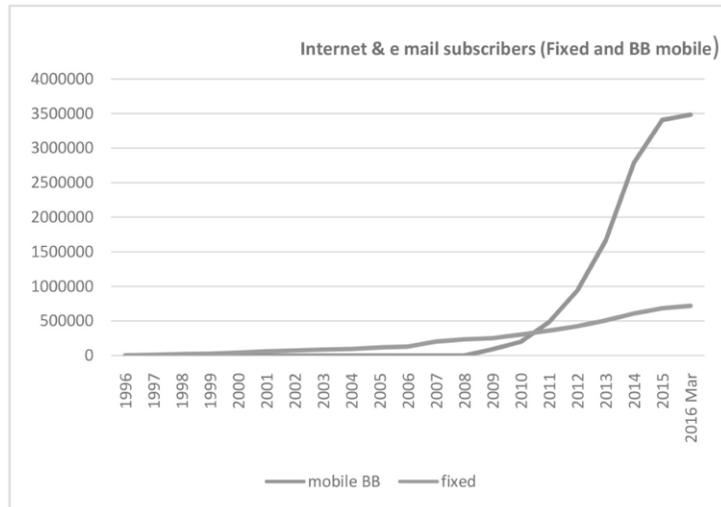


In tandem with the growth of information and communication technology (ICT), the surge in internet and e mail subscription (both fixed and BB mobile) is also noteworthy as depicted below.

Table 3: Internet and e mail subscribers (Fixed and BB mobile)



Year	Fixed	Mobile BB
1996	2,504	
1997	10,195	
1998	18,984	
1999	25,535	
2000	40,497	
2001	61,532	
2002	73,468	
2003	85,500	
2004	93,444	
2005	115,000	
2006	130,000	
2007	202,348	
2008	234,000	
2009	249,756	91,359
2010	302,000	200,000
2011	359,000	485,000
2012	423,194	942,461
2013	507,845	1,664,003
2014	606,100	2,790,195
2015	682,512	3,408,408
2016 Mar	718,168	3,484,079



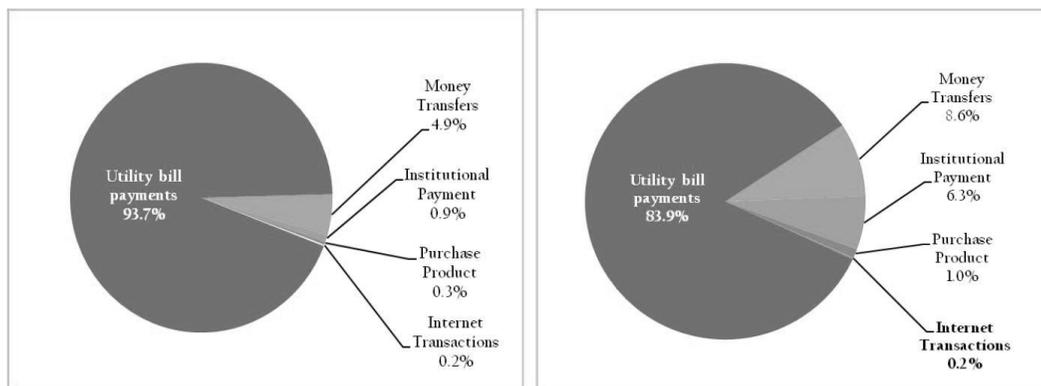
As a direct consequence of the rapid increase in mobile penetration and the ambitious initiatives undertaken by the financial institutions aptly supported by the regulators the volume and value of mobile banking transactions has witnessed a sharp increase in recent years as highlighted in the table and the chart below.

Table 4: Mobile Banking Volume and Value of transactions<sup>xii</sup>

Description	Volume				Value (Rs Million)			
	2014	Q1 2014	Q1 2015 (a)	% change Q1 14/15	2014	Q1 2014	Q1 2015(a)	% change Q1 14/15
<b>Total transactions</b>	717,622	113,633	306,432	169.7	7,845	1,388	2,803	101.9

(a)provisional

**Chart 1: Composition of mobile phone based e-money transactions Q1 2015- in volume and value terms<sup>xiii</sup>**



## 4.2 Potential for mobile banking/mobile money services in Sri Lanka

A 2011 study conducted by the IFC identified Sri Lanka as having the greatest potential for expansion of mobile money amongst four developing countries (Brazil, Nigeria and Thailand). The study also identifies several opportunities for mobile banking and mobile money products in Sri Lanka including inter-alia the following:<sup>xiv</sup>

### 4.2.1 Government to person (G2P) payments

Large government social welfare programs (such as SAMURDHI) which provides small ticket payments to millions of poor households could adopt mobile products and services as a cost effective and a time saving proposition

### 4.2.2 Payroll and person to person (P2P) payments

Person to person money transfer services and payroll systems targeting small businesses in the informal sector can be effectively used a launch pad utilizing the post office branch network and related infrastructure already in existence

### 4.2.3 Business to business (B2B) payments

Opportunities at each and every stage of agricultural supply chain involving small scale agri/dairy farmers could be explored particularly considering the distance constraints in reaching formal banking channels.

### 4.2.4 Inward remittances

Considering the significant contribution made by unskilled and low skilled migrant workers towards GDP and that the majority still opt to carry money physically or use friends and relatives



to deliver money to their kith and kin in Sri Lanka , mobile banking products and services hold great promise particularly in view of the granularity of the amounts.

#### **4.2.5 Payment of bills**

A mass market strategy targeting all segments of society to adopt mobile service payment of utility bills holds great promise and potential in the development of this sector. This is of particular significance since the middle and the upper segments of the society are the targets of almost all commercial banks for their mobile banking products and services neglecting the potential at the lower end of the pyramid.

#### **4.2.6 Public transport**

Considering that there are over 10 million daily commuters, adoption of mobile products has already been identified as a major opportunity with mass market appeal .

### **5. Initiatives undertaken by financial institutions -a step in the right direction**

The upsurge in the enthusiasm associated with high penetration of mobile phones has led commercial banks, specialized banks and several non-bank financial institutions to introduce a variety of e-facilities in recent times. Most LCBs have placed strategic emphasis on providing efficient, cost effective and seamless banking services to enhance customer accessibility and convenience resulting in migration to online and mobile platforms. Heavy investment has prompted the shift of customer service from high cost to low cost channels while emphasizing on efficiency with 24 x 7 service.<sup>xv</sup>

In their pursuit of transforming manual banking functions into self-service digitalized operations, some LCBs have even equipped their traditional brick and mortar branches with special counters to assist customers to shift to digital banking. Such ambitious initiatives are intended to enable all customers (regardless of their technological proficiency) to easily access bank services via hand held devices catering to “any time anywhere” attitude of today’s smartphone users.

Most mobile banking applications currently in use enable a multitude of functions/ facilities such as balance inquiry, cheque status, stop payments, credit card payments, utility bill payments, inward remittances and fund transfers. Internet banking customers can also access their account from anywhere in the world on mobile phones. The use of mobile telephones is rapidly growing in Sri Lanka, and most of the internet banking services can now be accessed through mobile phones. Available on the iOS and Android platforms, some mobile applications also offer direct connectivity through key social media platforms such as Facebook, Twitter and LinkedIn<sup>xvi</sup>



In pursuit of achieving the intended outcomes, key focus areas of some of the banks include strengthening system stability, ensuring access through multiple platforms and improvements to user interfaces and overall functionalities of system through the introduction of several personalized features.

The increasing number of customers opting for mobile banking in the recent years bears ample evidence of growing customer confidence and affirmation of customer acceptance of the product. For instance, People's Bank reported an unprecedented increase of 71% of mobile banking transactions during the year 2015. Internet banking transactions too indicated a considerable growth but lagged behind mobile phone based transactions (perhaps due to the lower internet penetration. During the same year People's Bank also saw an increase of 113% of customer registrations for mobile phone banking<sup>xvii</sup>

In addition to the prime objectives of empowering customers to access financial services from locations of their choice, conversion to online/ mobile banking has been written into the sustainability agendas of some commercial banks as an initiative to reduce paper consumption.

## **6. The profile of the sample**

The survey covered a sample of 50 households of urban micro finance clientele/ potential clientele centered around Galle Face Green representing all ethnic groups hailing from high density population localities such as Slave Island, Dematagoda, Kochchikade, Borella and Mutwal with a high level of urbanization. The survey sample concentrated on street food vendors / small scale traders who were either self-employed micro entrepreneurs or family workers centered around Galle Face Green and its immediate environment who belonged in the lower and lower middle income range consistent with the "entrepreneurial poor" who are often successful targets of micro finance institutions .

As the basis for the study, group discussions and questionnaire based interviews were conducted with members of the selected 50 households in the selected segment which provided valid justifications and information on their perceptions on mobile banking and the adoption of alternate channels for the distribution of financial services and products amongst this segment.

The selection of the survey sample was justified in view of the following;

- diversity within the group as to ethnicity, religion, age and sex
- high level of penetration of mobile usage amongst the group
- familiarity of the sample group with new technology
- continued and sustainable economic and business engagement
- business savvy entrepreneurial attitude and exposure to changing retail market trends



- stability of income in comparison to their rural counterparts that are solely dependent on seasonal harvest.

It should be also noted that the survey was not intended to be a statistically significant sample of customers and potential customer of mobile banking products and services but merely to provide an overview of the attitudes, preferences, issues and concerns of a selected sample which may form the basis of a more indepth study.

## **7. Composition of the sample**

### **7.1 Age and sex**

The demographic structure of the surveyed sample comprised of 40% within the age group 30-40 years while 30% of the sample were below and above the said age group respectively. Around 42% of the respondents were male thereby illustrating female dominance in small scale micro entrepreneurship even at urban level.

### **7.2 Period of Residence in current address**

A majority of 90% of the people surveyed had lived in the present location 10 years with over 44% having been residing in the current location since birth.

### **7.3 Education attainment**

The level of education was relatively high amongst the surveyed sample. Over 42% have passed GCE (Ordinary Level) while a sizable percentage of 36% have studied up to GCE (Ordinary Level) which can be attributed to the free education provided by the government and also to the fact that the law of the land mandates that all children below the age of 14 years should be sent to school. It was interesting to note that none of the respondents had any schooling.

### **7.4 Income, expenditure and saving patterns**

The income and expenditure patterns of the sample surveyed showed that the expenditure was more or less equivalent to the reported income. Although the surveyed sample is considered socially as the lowest income group of the urban centers, the results indicate that their economic status is rather close to the lower middle income strata rather than the poorest strata in terms of their expenditure and income generation capacity. Almost all respondents (98%) reported an average monthly income of around Rs 30,000/- of which 36% recorded a monthly income of over Rs 50,000/-. However the surplus available for saving was less than Rs 10,000/- in case of the majority 54%.



## **7.5 Type and nature of employment**

Based on the composition of the surveyed sample over 90% comprised of self-employed small scale businessmen involved in micro business such as supply of fast food, beverages, sweets and micro traders in grocery, toys and accessories. The sample also included few three wheeler drivers and few respondents employed in the private sector as laborers in the service industry (cleaning, cooking, restaurant helpers etc.) It was rather interesting to note that the source of income centered around business activities and wages (in case of few) while remittances were not one of the major sources of income of the surveyed group.

## **8. Limitations of the survey**

The survey sample concentrated only on 50 selected respondents from 50 households centered around the underserved settlements in the heart of the city of Colombo. Hence the responses may reflect the limitations and constraints faced by such communities which may not be identical to urban micro entrepreneurs elsewhere in the country.

Further, the majority of the surveyed sample included existing micro finance customers of commercial banks and micro finance institutions. Hence, almost all respondents had existing relationships with formal and semi-formal financial institutions with a credit and savings history (although the amounts involved may be granular), in the circumstances, the survey results may not reflect the actual picture of those actual unbanked and under banked at the bottom of the pyramid.

The findings of the survey also do not draw relationship between mobile banking and key determining factors such as age, education, occupation and income level since the surveyed sample is rather homogeneous. A study conducted in 2008, involving a sample of 1000 households drawn from rural, urban and estate sectors reveals that younger people are more accustomed to e-banking and the relationship between household income and e banking is positive.<sup>xviii</sup>

However, based on the results of this sample survey, a further in depth study is warranted to understand and ascertain the actual constraints as to why mobile banking is not gaining due recognition and acceptance by the targeted clientele at the bottom of the pyramid and the possible remedies to overcome such constraints in the event mobile technology is to be effectively adopted as a tool of financial inclusion.

## **9. Survey findings**

Financial literacy of the surveyed sample was much higher than anticipated and the majority have had interactions with formal financial institutions although not on a regular basis. Since a wide array of institutions (formal, semi-formal and informal) are involved in providing financial services to the low income groups in Sri Lanka ( particularly the entrepreneurial urban poor) , the



interactions with financial service providers were examined using multiple criteria such as types of institutions, purpose of transactions, nature of services obtained , preference towards using alternate banking distribution channels vis a vis traditional bank branches .

### 9.1 Interaction with financial institutions

Institution	Percentage
Commercial Banks	82%
Micro finance Institutions	48%
Leasing companies	24%
Licensed specialized banks	24%
Societies and Associations	10%
NGOs	6%

Source: Survey, conducted by the Author - 2016/08

The above statistics also coincide with the outcome of a household survey on E money conducted in 2008/09 wherein it was reported that, around 85 percent of the households have an account in commercial banks and about 43 percent have accounts in credit co-operatives and microfinance institutions (MFIs). A major reason for the high proportion of the banked in Sri Lanka is the rapid expansion of the banking network.<sup>xix</sup>

### 9.2 Purpose/nature of transacting with financial institutions

The majority of the surveyed sample indicated that the prime purpose of their interaction with any financial institution was either to save or to borrow money while a relatively low percentage of 10% indicated withdrawal of money (primarily inward remittances from kith and kin employed abroad) as the purpose of interaction with financial institutions. In the above context almost 100% of the surveyed sample maintained savings accounts while 70% used ATM cards and a sizable 24% maintained minor savings accounts. The share of current accounts was almost negligible amongst the survey sample. The high percentage of savings was attributable to rigorous savings campaigns and awareness programs undertaken by formal financial institutions via media and schools as revealed during the in-depth discussions with the surveyed sample. Usage of credit cards and internet or mobile banking facilities were miniscule amongst this segment despite the high penetration of mobile devices.

Purpose/nature of transaction	Percentage
Savings	90%



Credit	82%
ATM card	70%
Minor savings	24%
Withdrawal of remittances	10%
Current account transactions	04%
Credit cards	02%

Source: Survey conducted by the Author - 2016/08

It was also interesting to note that despite the abundance of financial service providers in the urban sector, the Seetu system (the rotating savings and credit system) still continued to be widely accepted by a majority of households covered by the sample. Based on the discussions the author had with the sample group the practice of Seetu system appeared to be a conscious choice to meet the lump sum requirements for specific household needs such as weddings, jewelry and purchase of household items. The preference for informal sector was primarily attributable to convenience, absence of rules and regulations and heavy documentation. Further the opportunity cost of time as well as the customer friendly service of the informal sector were the main attractions.

### 9.3 Ownership of information and communication equipment

As illustrated in the table below, the survey data on the availability of information and communication equipment in the households reflects the enormous capacity to adopt mobile banking even among the surveyed sample. Basic amenities such as electricity, radio, and television were available to all the households across different income groups in the surveyed sample while almost 100% of the surveyed households were in possession of mobile phones. Ownership of other equipment such as computers, e-mail and internet facilities were rather limited whilst almost 40% of the sample boasted of ownership of CD drives. Interestingly only 8% of the households have land phones.

Item/facility	Percentage
Radio	100%
Television	100%
Mobile phone	100%
Land phone	08%
CD drive	40%



Laptop computer	02%
Internet and e mail	02%

Source: Survey conducted by the Author - 2016/08

## 9.4 Awareness and usage of electronic banking channels

As illustrated in the Table below most respondents in the surveyed sample were acquainted with the usage of ATM cards and ATM machines. However little or low enthusiasm was indicated on other electronic banking channels perhaps due to lack of awareness on the product and usage as discussed in paragraph 9. 6 in detail.

	No knowledge and not interested	No knowledge but interested	Somewhat familiar but not interested	Somewhat familiar and interested	Familiar but not interested	Familiar and using
Internet Banking	62%	28%	6%	2%	-	2%
ATM machines	4%	8%	4%	8%	-	76%
Mobile Banking	64%	30%	2%	2%	2%	-
E remittances	84%	16%	-	-	-	-
Mobile cash	76%	20%	4%	-	-	-

Source: Survey conducted by the Author - 2016/08

## 9.5 Purpose of using mobile phones

Despite the unusually high penetration of mobile phones amongst the surveyed sample group, only 2% of the survey sample use their mobile phones for mobile banking as shown in Table below. The majority use mobile phones for communication purposes including SMS messaging, which is very popular among the youth while a sizable proportion of mobile phone users in the surveyed sample used the devices for entertainment such as listening to music and photography. About 40% of the surveyed sample indicated use of mobile devices for business purposes, which was primarily to interact with clients and suppliers.

Purpose	Percentage
Communicate	100%
SMS messaging	80%
Business	36%
Listening to music	58%



Photography	50%
Banking	2%
Employment related/ Purchase of goods	2%

Source: Survey conducted by the Author - 2016/08

The above findings are also consistent with the findings of a World Bank Study conducted in 2014 where it was revealed that the majority of the population in underserved settlements in urban poor households used mobile phones only for communication purposes.<sup>xx</sup>

## 9.6 Reasons for not using mobile banking products/services

As shown in Table below, the most obvious reason for non-utilization of the mobile channel was ignorance on the product and “technical aspects” in usage. A sizable percentage (almost fifty per cent) expressed concerns about their mobile devices not being compatible (perhaps since the majority of the surveyed sample were not in possession of smart phones). Little or no emphasis was placed by the surveyed sample on the security aspects of accessing financial information using a mobile phone.

Reason	Percentage
Expensive	8%
Security issues	-
Difficulties in usage	54%
Phone not compatible	48%
No understanding about mobile banking	60%
Never heard about mobile banking	-
Not necessary	-

Source: Survey Conducted by the Author - 2016/08

However, it was interesting to note that none in the surveyed sample considered mobile banking as “not necessary” since almost all of them were aware about the existence of the product /service although they lacked even basic knowledge about it. Hence, it may be presumed that lack of interest may be attributable to the lack of awareness on the actual usage of the channel.

## 9.7 Preference as to distribution channels

Almost 100% of the surveyed sample opted for physical human interface in their routine financial transactions and preferred brick and mortar branches above all other channels regardless



of convenience. This may be attributable to the importance and dignity of being customers and associated with formal banking institutions amongst these particular segments of the society or uncertainties associated with mobile banking and other e channels arising of from ignorance.

## 10. Issues and concerns

The sustainability of mobile banking (as any other form of branchless banking) will depend on appropriate and coordinated regulation and supervision across the relevant regulatory domains including, banking, payment systems, telecommunications and consumer protection. The regulatory challenge will be to create a space for innovation and competition while balancing financial security and consumer protection particularly if mobile banking is to be adopted as a cost effective and efficient means of financial inclusion. In this regard, a number of key issues (rather concerns) need to be addressed:

- Is the regulatory framework more inclined to promote transactional revenue to stakeholders while neglecting the clientele at the bottom of the pyramid who should be the actual beneficiaries of such technological advancements?
- Are retail outlets and other third parties allowed to be service providers to customers of banks and other financial institutions offering deposits and withdrawals, account opening and other services?
- Is the retail payment system available and affordable to service providers that want to serve the low income clients?
- Do the AML regulations permit banks to use agents to conduct KYC and perform other compliance functions?
- Are there clear regulations and clear authority over the different actors involved in branchless banking (with emphasis on mobile banking)?
- Are the consumers protected from the particular risks posed by the branchless delivery of financial services and its use of agents and other third party actors?<sup>xxi</sup>

## 11. Recommendations

### 11.1 Regulatory framework inclined towards financial inclusion objectives

Under the provisions of Mobile Payment Guidelines No 1 of 2011 for the Bank led mobile payment services, banks are permitted to delegate to 3rd parties for cash in/out to only their accounts; customers must be acquired through existing bank channels and must open an account with the respective bank as a condition precedent to availing the service. On the other hand Mobile Payment Guidelines No 2 of 2011 for custodian based mobile payment services facilitates non-banks to acquire wallet only services. In this regard it will be important to monitor any anticipated consequences such as a risk that mobile operators will only pursue features that promote



transactional revenue, hindering progress towards introducing a deeper and more diverse set of financial instruments to address financial inclusion objectives<sup>xxii</sup>

## **11.2 Deployment of agents/ third parties**

The enhancement of the outreach of mobile banking (as in many other branchless banking channels) as a cost effective and efficient means of financial inclusion depends on agents/ third parties being able to perform the direct customer interface function including, most importantly acceptance and disbursement of cash. A suitable regulatory framework including conditions for banks and non-banks use of agents or other third parties as a customer interface is of paramount importance. Limitations on the nature and qualifications of agents and other third parties need to be created carefully to avoid limiting the outreach to targeted clientele since overly tight restrictions can seriously impede outreach to the under banked and unbanked segments. Rules that prevent third parties from acting on behalf of a financial institution to open customer's accounts or to handle cash typically need to be revisited if regulators intend to extend financial access by enabling branchless/mobile banking. In this regard it should be noted that since their scope of permitted activities are rather limited (in comparison to financial institutions) they need not be subject to the same level of regulation and supervision in order to achieve the intended results of financial inclusion.

Considering that most non-bank E money issuers are small scale operators, regulators should emphasize on protecting the "float" (public funds held in the form of e money by the e money issuer) rather than mitigating the systemic risk. To mitigate the risk, the use of the float can be restricted to ensure that funds are not at substantial risk. Further, more clarity needs to be made as to the financial service provider's liability for the acts of its third party contractors .It would be appropriate to hold the principal liable for actions instituted by the agents (in connection with the agents specified responsibilities including compliance with AML requirements and consumer protection laws) although the principal ( in most instances) is not well positioned to prevent criminal acts by unrelated parties and cannot be held responsible for certain risks such as fake agents who act without principal's knowledge.

## **11.3 Value additions**

Innovative measures to expand the mobile money eco system through value additions would have a direct impact on customer convenience and efficiency. These may include incentives encouraging the use of mobile banking channel such as waivers of fees and charges, bonus points, prize draws and gift schemes based on usage. For instance, accumulation of points for exclusive usage of mobile channel would earn instant rewards which could also be encashed through the system. Accordingly, the relevant mobile applications should be designed to encourage and promote exclusive usage of mobile channel via such reward and incentive schemes.



## 11.4 Market expansion

A system to channel international inward remittances through mobile money wallets as a cost effective, convenient and secure way should be prioritized considering the contribution made by the migrant workers towards the country's economy. Despite many products and e-remittance facilities such as internet banking, e-Cash, X-press Money, MoneyGram, EZ-Money and Telemoney (with lavish gift schemes and incentives) have been introduced by local banks to attract foreign remittances of Sri Lankan migrant workers, it is estimated that around 45 percent of total remittances are remitted through informal channels.

## 11.5 Consumer protection

Mobile banking also raises a new layer of consumer protection concerns in view of the following:

- Use of third parties as the principal customer interface
- The potential physical distance between the customer and provider
- Relatively inexperienced customers

Accordingly, consumer protection laws need to be revisited and reviewed in the context of mobile banking. Clear display of pricing and fees should be required, not only for transparency but also to reduce the risk of customers being overcharged. There should be a clear display of recourse mechanisms as well as a simple complaint mechanism catering to less sophisticated clientele using the same technology.

In this regard it should be noted that CBSL guidelines require that terms and conditions for mobile money service must be provided in Sinhala, Tamil and English and should include information on dispute resolution which is a step in the right direction

## 11.6 Application of AML regulations

Mobile banking (as any other branchless banking channel) raises two primary obstacles<sup>xxiii</sup>; firstly, many low income individuals are not in a position to submit the documentation normally required by formal financial institutions to establish identity. Secondly many national AML regimes do not encourage remote account opening or account opening by agents; further recordkeeping requirements can also be rather cumbersome for agents who are often hindered with limited storage capacity. Hence a flexible and risk based AML approach considering that small transactions pose a reduced risk in money laundering and terrorist financing may cater to low income clients with limited access to formal documentation if mobile is to be adopted as a means of financial inclusion.



## **11.7 Customer Education**

As evidenced from the results of the survey, lack of awareness of the mobile banking product and knowledge of the technical aspects of the usage of mobile devices can be construed as the main constraints in popularizing mobile banking amongst the entrepreneurial poor. Hence, any initiative towards the adoption of mobile banking as a channel of financial inclusion should essentially focus on a simple step by step education process targeting the intended clientele on the use of mobile banking in their day to day financial transactions. The process should also inculcate trust in the system security since it concerns the hard earned money of the marginalized segments.

## **11.8 Device Compatibility**

The sophistication and complication in the usage of smart phones has also been a hindrance since the majority of Sri Lankan mobile users (particularly those at the bottom of the pyramid) use “non- smart” mobile phones with rather limited capabilities which are not compatible with internet access/coverage. Hence designers of mobile phone applications should take serious note of developing separate technology (perhaps USSD/SMS based) to support “non- smart” phone users who form the majority of the targeted clientele for financial inclusion.

## **11.9 Co-ordination amongst key stakeholders**

Mobile banking brings together actors from a wide spectrum of industries outside the financial sphere such as telecommunications and retail distribution. As a result, ambiguities and discrepancies in the application and interpretation of regulations applicable to respective stakeholders may result in conflict or weaknesses in enforcement which may dampen the intended results. In the above circumstances, effective co-ordination amongst the regulators may be crucial to avoid any potential loopholes and ambiguities in application and enforcement of regulations and supervision.

## **12. Conclusion**

Digital financial inclusion in Sri Lanka has tremendous growth potential. Use of technology such as mobile phone and smart card readers to transmit transaction details and using retail establishments to act as the principal customer interface holds the promise of significantly expanding financial access by lowering transaction costs to the lender and improving convenience for the customer <sup>xxiv</sup>

As amply evidenced from the findings of the study despite the remarkably high penetration of mobile phones in Sri Lanka over the last decade covering those at the bottom of the pyramid, they are hardly used for financial transactions. As a result, the country has been losing



opportunities to optimize use of mobile phones as an alternate banking channel for mass market despite the concerted efforts made by leading licensed commercial banks.

Lack of awareness about mobile banking applications and usage, a major impediment to the expansion of mobile money systems amongst the unbanked and under banked segments of the Sri Lankan society. The application of mobile banking is largely limited to commercial bank customers in Sri Lanka making it an additive model. A major reason for this could be that the practical application and usage of mobile banking devices in the conduct of day to day banking transaction is not being widely publicized. Such information asymmetry can be overcome through counseling, advertising and publicity programs.

As discussed in this article, formal financial institutions are often not inclined to entertain the marginalized clients for reasons such as high risks and costs involved or socioeconomic and cultural factors. Further almost all formal financial institutions (specially the commercial banks) consider mobile money and mobile banking services as a niche market which is available as an additional and more convenient channel for their existing customer.<sup>25</sup> Therefore, the potential of mobile phones to extend financial facilities to unbanked and underbanked segments people needs to be reviewed and revisited in an environment of rapid penetration of mobile phones throughout the country.

In the above backdrop, affordable mobile devices and mobile services, awareness of mobile banking application amongst low income households and a regulatory framework that creates a transparent and level playing field for mobile money are necessary ingredients for the development of an inclusive digital financial sector providing a platform for financial inclusion of all Sri Lankans as part of the overall development roadmap envisioned for the country's electronic payments landscape. In this regard, banks will be compelled to play an unconventional and proactive role .

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