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Best Practice for Implementing Mobile Finance in Low-Income Communities

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Abstract

Growth in access and affordability of mobile phones across the world has enabled financial services to be delivered digitally through handsets, referred to as mobile-finance. Despite large investments into mobile-finance in developing countries there has been a lack of active uptake among the poor. In this paper, the challenges of implementing mobile-finance in low-income communities are explored through literature review and analysis of secondary data from online discussions and webinars held by donor organisations.

Best practices of donor organisations are synthesised with the challenges faced by low-income communities and consideration is given as to whether there are misalignments between donor policies and the needs of the poor. The findings identify challenges that can be partly addressed by the poor themselves, pertaining to trust, social norms and financial literacy, as well as donor best practices to counter those challenges, relating to financial education and the effective operation of agent networks. Other challenges, that cannot be addressed directly by the poor, are identified relating to competition policy and regulatory action to counter weak infrastructure and affordability.

Based on the identification of misalignments between donor policies and the needs of the poor, recommendations are made concerning transparency in relation to the benefits and risks of mobile-finance, addressing unequal power relations between providers and users of mobile-finance services, the enactment of bottom-up participative approaches to implementation, and proper consideration of local contexts in order that the poor are not seen as a homogeneous group.

A. Introduction

Due to expanding network access[1] the mobile phone is becoming a viable way for the unbanked to become financially included (Potnis 2014). Mobile-finance (m-finance) can be understood as the use of a mobile phone to access various financial services such as payments, credit and insurance products as well as the ability to save (Chib et al. 2015). Financial products encompassing all of these services have grown over the past 10 years with 271 mobile-money applications now deployed worldwide (GSMA 2016b). A large number of the initial investments in m-finance were made by donor organisations[2], who created local partnerships with NGOs and the private sector to kick-start new deployments. For example, m-Pesa in Kenya was initially developed and launched with the support of £1,000,000 from the UK Department for International Development (DfID) and their continuing research has been influential in shaping mobile-finance practices (Martinez & McKay 2011).

The role donor organisations play varies depending upon local country programmes, but largely they work providing technical and financial assistance and supporting mobile network operators (MNOs) and banks at an industry level (van Hove et al. 2014). Donor organisations have been criticised for prioritising investments in countries which are already more financially developed and for investing heavily in key players such as Vodafone and Airtel (as opposed to smaller start-ups). It is argued by Vota (2013) that the MNO-targeted strategy has been followed by donors in order to reach a larger number of users and to increase the chances of sustainability. For publicly-funded donors, this has provided justification for how funds have been spent and enables them to show where targets have been met and development impacted (El-Zoghbi & Gahwiler 2013). The rapid expansion of mobile-finance in developing countries is significantly accelerated and supported by the efforts by the various donor organisations, but a question arises of whether the policies and approaches of the donors for the use of mobile technology are meeting the financial service needs of low-income communities?

This working paper examines the approaches to best practice of the major donors who are active in m-finance in developing countries. The evidence is synthesised from published literature and from online discussions held by donor organisations. The paper evaluates possible misalignments between donor policies / programmes and the financial service needs of low-income communities. The views and interests of donors are evidenced in webinars, panel discussions and online forums that form part of the policy and programme development of donors. The study adopts an interpretive epistemology, viewing the m-finance space as made up of many realities which the researcher can interpret (Myers 2013). Thus, evidence is identified from multiple sources, recognising they will vary in importance and impact for each individual or donor organisation depending upon their

[1] The ITU (2015) estimates that 91.8% of developing countries have a mobile subscription (Africa has the lowest number of subscriptions with 73.5%); 39.1% have an active mobile broadband subscription (Africa has the lowest number of subscriptions with 17.4%). Full statistics are available at: https://www.itu.int/en/ITU-D/Statistics/Pages/stat/default.aspx

[2] Donor organisations that have funded m-finance include public-funded bilateral agencies such as the UK Department for International Development and USAID; multilateral agencies such as the World Bank and UN agencies, as well as regional banks like the African Development Bank (ADB); and privately funded donors like the Bill & Melinda Gates Foundation, the MasterCard Foundation and the Grameen Foundation (El-Zoghbi & Gahwiler 2013).

experience and the way they see the world. The paper begins by giving an overview of the potential benefits of m-finance for low-income communities. The analysis then examines the challenges which donors and practitioners consider in their online discussions and the way that the best practices to overcome the challenges are deliberated. The challenges and best practices as evidenced in the discussions are then synthesised with the existing literature to assess whether there are misalignments between the donor approaches to m-finance and the needs of low-income communities. The conclusions suggest recommendations for policy and programme development to ensure that approaches taken by donors are more appropriate to the financial needs of poor communities.

B. m-Finance and Financial Inclusion

Financial inclusion refers to the ability to access formal financial services such as savings, credit, loans, insurance and the ability to make payments. Access to formal services reduces the risks that can be experienced in the informal sector, and stimulates the ability of rural low-income communities to contribute to economic development, thereby increasing welfare, lessening social exclusion and reducing poverty (Kundu 2015; Donovan 2014; Sarma & Pais 2011). For these reasons financial inclusion is an important policy goal in a number of developing countries which is evidenced by the myriad of microfinance initiatives and localised self-help financial groups (Vaithilingam et al. 2013). M-finance has been made possible by the rapid accessibility and uptake of mobile phones in developing countries, and has been labelled as a ‘game changer’ for un-served low-income households, and as a way for the financially excluded to climb the ‘banking ladder’ (Donovan 2014; Morawczynski 2009).

M-finance is seen to confer certain potential benefits for the financially excluded. Firstly, c*onvenience of sending and receiving remittances*: sending and receiving remittances before the advent of m-finance was expensive, it involved high risk due to the chance of loss or theft of cash, and was often subject to long delays (Jack & Suri 2014; Wamuyu 2014). Secondly, a *reduction in the inconvenience of visiting bank branches*: evidence from Kenya and Ghana has shown that banks were too far away from their communities, and when people visited bank branches they were often subjected to long waiting times due to the high amount of counterfeit bills in circulation as bank tellers had to thoroughly check all denominations (Tobbin 2012; Kumar et al. 2010). Thirdly, *encouraging saving and reducing risk*: through analysing household survey data in Kenya from 2008 to 2010, Jack & Suri (2014) found that m-finance enables users to save and therefore insure themselves against shocks, as well as increasing the chances of receiving remittances in times of need. After a negative shock had been experienced, users were 13 percent more likely to receive remittances than those without m-finance services. Fourthly, *increasing empowerment for women*: for women, the advent of mobile-finance can enable them to save independently, avoid risk and thereby increase empowerment (Morawczynski 2009). For example, in Bangalore for a woman to request a loan she must be accompanied by a man despite the fact that the woman has the sole responsibility of repaying the loan (Chavan et al. 2009).

Evidence of m-finance reaching low-income communities tends to be based on qualitative case study and anecdote, and empirical studies are thin on the ground, which is surprising given the considerable potential impact on the poor (Chib et al. 2015). Moreover, evidence tends to focus on potential benefits if people were to adopt the services, as opposed to demonstrating real impact. It has been suggested that a reason for lack of evidence is that few m-finance initiatives, despite their claims, actually target or reach low-income communities (Kikulwe et al. 2014). For example, a study of mobile banking users in Brazil which interviewed 333 users and non-users found that the majority of those that did use the mobile services were male, already banked and economically better off (Puschel et al. 2010). A recent review of the literature by de Albuquerque et al. (2016) found that the relationship between use of m-finance and financial inclusion has not been explicitly addressed and that the correlating relationship is often presumed rather than based on empirical evidence. Kundu (2015) argues that when a user opens an account or becomes registered to an m-finance platform, this is merely the first step, the user must then make regular use of the platform to be financially included. Moreover, Duncombe (2012) warns against seeing financial inclusion in absolute terms and argues that whether or not an individual views themselves as financially included depends on local and contextual factors. Finally, many of the unbanked have made use of informal financial services such as local lending groups and may have been formally excluded, but not financially inactive (Donovan 2014). This further complicates the distinction between what it means to be financially included and excluded from the perspective of those in developing countries.

Literature reviews of m-finance conducted by Chib et al. (2015) and Duncombe & Boateng (2009) found that m-finance deployments that engage with low-income groups have been less common. Not only have the poor not been the central beneficiaries of m-finance, but there is also uncertainty about how much development impact these applications can deliver to the poor (Chib et al. 2015; Ismail & Masinge 2011). While there are undoubtedly potential benefits of m-finance for low-income communities, in reality there is considerable uncertainty about the rate of uptake of m-finance services by the poor, and certainly by the poorest.

C. Research Design

Underlying philosophical assumptions affect the way research is carried out as well as its validity (Myers & Avison 2002). Hermeneutics, which is the art and science of interpretation, will be used to analyse online forums, webinars and panel discussions, where experts and practitioners present and discuss issues related to m-finance for low-income users. Adopting a hermeneutic approach is appropriate for this study as it matches with the researchers' philosophical assumptions that reality is socially constructed and cannot be objectively defined (Robson 2011). Therefore, this study adopts an interpretive epistemology, viewing the m-finance space as consisting of not a single, but many realities, which the researcher can interpret. Therefore, evidence is identified from multiple sources, recognising they will vary in importance and impact for each individual or organisation depending upon their own experience and the way they see the world (Myers 2013; Walsham 1995). The study is concerned with the implementation stage of m-finance, so an assumption is made that the original design intentions for the mobile platforms and the business models were specified in a way that made them (at least partially) applicable to low-income populations and reflected their needs.

Whilst the data is secondary, and has not been collected or directly observed by the researchers first hand, no previous studies have been found which analyse this type of data and therefore the study will offer a unique analysis. Saunders et al. (2012) note that reliance on secondary data can be challenging as often the data has been collected with different aims than that of the researcher. In this case, the webinars and panel discussions also contained information that was not directly relevant for the study. Therefore, a large volume of data was analysed, but was further limited by identifying sources from three years prior to the study, also ensuring that the data represents current ideas and debates in what is a fast changing setting. Qualitative methods focus on the analysis and interpretation of text-based and oral (video-recordings) sources in order to better understand the phenomenon within a natural setting and the validity of the findings is dependent upon the level to which the analysis gives an accurate reflection on what has been studied (Collis & Hussey 2009).

To ensure the validity and legitimacy of this study, data triangulation was used, achieved by sourcing discussions from a range of organisations with different participants in order that varying views and experiential data are assessed. The organisations from which these discussions are sourced are set out below (Table 1) and outlined in more detail in the Appendix. In order to conduct the interpretative analysis, the content of the discussions were classified as primary or secondary themes which are set out in the discussion of key findings. The classification of the themes and the views of the participants in the discussions are viewed through the researchers' own 'conceptual apparatus' (Walsham 1995, p77). Therefore, the analysis is subjective and influenced by the researchers' prior knowledge of m-finance and the existing literature. Walsham (1995) recognises that this is an appropriate way to carry out interpretative research as the best tool for analysis is the researcher's own mind.

A broad range of opinion and experiential evidence was analysed from the online discussions, but in some cases the evidence base was not representative of diverse views. For example, the 2015 CGAP Panel consisted of mostly CGAP employees or past employees and therefore the experiences were confined to that of CGAP. As only a relatively small number of discussions were analysed, the research does not give a fully comprehensive view of all donors and practitioners working in m-finance, and therefore the findings in this study cannot be generalised as representative of donors as a whole.

Table 1. Data Sources: Panel Discussions and Online Forums

Title	Description	Organisation	Date
Discussion 1: "Marketing mobile-money: top 3 challenges"	Webinar held to discuss the marketing challenges when implementing m-finance in low-income communities	GSMA[3]	2012
Discussion 2: "Exploiting opportunities for mobile money in untapped markets"	Panel discussion at the Mobile Money Summit 2012	GSMA.	2012
Discussion 3: "Riding the rails of mobile money"	Panel discussion at the Mobile Money Summit 2013	GSMA.	2013
Discussion 4: "Designing e-payments for the poor: the importance of recipient communication channels"	Discussion of findings from research into how e-payment platforms for the poor should be designed	BTCA[4]	2014
Discussion 5: "Doing digital finance right"	Presentation and panel discussion to assess the risks that low-income communities face within m-finance	CGAP[5]	2015
Discussion 6: "Mobile-money: why isn't the m-Pesa effect hitting more countries?"	Forum to discuss why more countries haven't seen the same success as m-Pesa in Kenya	The Guardian[6]	2015
Discussion 7: "Where do we build banks where none exist?"	Forum to discuss the role that mobiles can play in banking the unbanked	The Guardian	2015

D. Key Findings

From the discussions, three themes were identified that were of primary concern (see also Figure 1): social norms and local context; lack of knowledge and financial illiteracy; and the activity level of low-income groups. Primary themes were discussed more prominently by the participants and were also identified because they were related to key underlying concerns, rather than resulting directly from the existence of m-finance services. A further six secondary themes were also identified. These received less coverage in terms of discussion time, and were also more directly related to the provision of m-finance services for those on low-income. The distinction between primary and secondary themes is not necessarily a reflection on the importance that the topics hold for low-income communities,

[3] The GSMA is the global association of mobile operators founded in 1995. They set up a Mobile for Development Foundation in 2007 and through their 'mobile money for the unbanked' (MMU) programme work towards promoting financial inclusion for low-income groups. GSMA currently have 271 live MMU deployments and are funded by the Bill and Melinda Gates Foundation, MasterCard Foundation and the Omidyar Network. See: http://www.gsma.com/

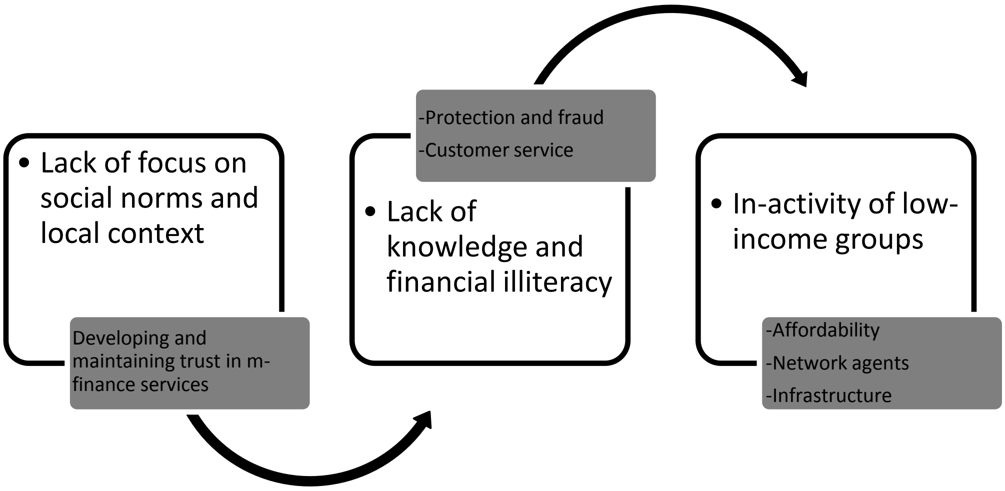
[4] Better-than-Cash-Alliance (BTCA) is a consortium of public and private sector institutions made up of key players working towards developing mobile-finance for financial inclusion. It was launched in 2012 to meet the growing demands for research, strategic advocacy and guidance in digital finance and was founded by the Bill & Melinda Gates Foundation, Citi Bank, Ford Foundation, Omidyar Network, USAID and Visa. See: https://www.betterthancash.org/

[5] The Consultative Group to Assist the Poor (CGAP) is a global partnership made up of bilateral and multilateral donor agencies, regional banks, financial institutions and foundations. Established in 1995, CGAP began working in microfinance and now have a considerable amount of resources devoted to digital financial services to improve the lives of the poor. They are housed at the World Bank and are funded through member contributions to trust funds which are administrated by the World Bank. See: http://www.cgap.org/

[6] The Guardian media group, through its Global Development Professionals Network, brings together donors, NGOs and development practitioners to discuss a wide variety of trending issues. Two online discussions analysed in this study have been sourced from: http://www.theguardian.com/global-development-professionals-network .

but merely represents the varying types of concerns as well as the weight of deliberation for each theme by the participants.

Figure 1. Thematic Analysis



D.1 Primary Themes

Social Norms and Local Context
Two main areas relating to social norms were touched upon by the panellists. Firstly, the important role of social networks in influencing decisions, and secondly, the preference for face-to-face contact. The importance of social networks for low-income users was addressed by Natalie from *Visa* who stated that... *"many are reluctant to join other mobile money schemes out of the fear of being alone. They want to be on the same network and mobile money platforms as their friends"* (Natalie Baatjies, Discussion 6, 2015). This demonstrates the preference for users being on the same networks as friends and family which could also be related to interoperability issues where services don't work across platforms and therefore users have to use the same service in order to make transactions between one another. Secondly, recognising the preference for face-to-face contact was argued to be important when implementing m-finance for the poor by Moinuddin from *BKash* in the 2013 Mobile Money Summit. Moinuddin stated that... *"keeping the human touch was necessary"* and that the way to do this was through the agent network (Moinuddin Raghi, Discussion 3, 2013). Fatima from *M-Paisa* in Afghanistan agreed with Moinuddin in the discussion and reiterated that one of the main reasons why agents are used in m-finance is to keep the human touch element. This statement reiterates the important part that agents play in the deployment of m-finance for low-income groups.

In order for social norms to be understood and incorporated into the implementation of m-finance, the donors, MNOs and financial institutions must have an awareness and appreciation of varying local environments and contexts. There was varying evidence from the panellists to suggest that the donors were actively speaking with low-income groups to understand specific needs. Javier the CEO of *$ERO* stated that... *"BoP users do not have sophisticated needs, they need basically two things, on the one hand universal acceptance of* *electronic money and on the other hand they need access to credit"* (Javier Borkenztain, *Discussion 7*, 2015). Not only does this statement from Javier suggest that low-income groups are homogeneous with the same needs and desires, but it also suggests that their needs are not sophisticated. Interestingly, none of the other panellists questioned Javier on his statement despite comments made later by other panellists suggesting that low-income communities have a wide range of needs. Moreover, recent literature has shown that there is often a higher preference for savings over credit (a trend recognised by a number of other panellists in the discussions) which indicates a misrepresented view from *$ERO* on what the needs and preferences of low-income users are.

In the 2012 *GSMA* webinar, Yasmina pointed out that often MNOs will only produce one mass-marketing campaign, which does not always reflect the needs of certain groups and instead, smaller tailored marketing campaigns should be encouraged. For example, the m-Pesa tagline of 'send money home' was argued to be so successful because it clearly spoke to the demand of the urban workers whom it was targeting. Likewise, Nick from *John Howell* says that, in his experience, international donors and NGOs that work in low-income countries do not have enough local knowledge and that this needs to be mitigated by working with local professionals who have worked in these areas previously. This demonstrates that there is recognition that local context should be considered, but that in practice it may not always happen. Moreover, Nick's suggestion to consult with professionals as opposed to work alongside locals may indicate a top-down approach to the implementation of m-finance.

In the Guardian online forum on how to replicate the success of m-Pesa, there was a consensus among the panellists that one key reason for its success was that it accorded with the local practice of sending remittances. Greg from *Millicom* supported this by testifying that... *"financial services are unique to each country"* and that other m-finance successes that he has seen in Latin America have been largely due to products being tailored to meet local needs (Greg Reeve, Discussion 6, 2015). In support of this, Annabel from *MicroSave* argued... *"providers must understand their customers inside out… what drives them to make certain decisions"* (Annabel Schiff, Discussion 6, 2015). Similarly, Natalie from *Visa* stated... *"we need to take time to understand the unique needs of each population group"*. MTN Uganda has effectively addressed the needs of their subscribers which is evident from their astronomical daily transaction rate (Natalie Baatjies, Discussion 6, 2015).

Natalie goes on to argue that there is not one m-finance model that can be replicated and repeated globally. This point is similarly advocated in the 2013 Mobile Money Summit by Fatima, who draws from her own experiences with m-Paisa in Afghanistan, explaining that originally the m-Pesa model was implemented, but they quickly saw there was not demand for P2P payments, but for salary payments which was how the platform subsequently developed.

Lack of Knowledge and Financial Illiteracy

Overall, in each of the discussions there was general agreement that financial literacy, education and training were important for the successful implementation of m-finance for low-income communities. For example, Nambuwani from *CiFi* stated that... "*continuous customer education is crucial*" (Nambuwani Wasike, Discussion 6, 2015) and Joshua from

Vesta stated that no matter how good a product is, for it to be adopted and used effectively, training and education are... *"a critical step in the chain"* (Joshua Rush, Discussion 2, 2012). However, the way that education and training should be approached differed among the participants with four main approaches put forward. The first approach was the deployment of mobile agents to educate and train new users, advocated by both Shaibu from *MTN Uganda* and Chidi from *Airtel* in the 2012 Mobile Money Summit panel discussion. Chidi suggests that agents should... "*give demonstrations and walk [low-income users] through what the benefits will be*" (Chidi Okpala, Discussion 2, 2012). The role of agents in educating and training low-income users was generally agreed upon in the CGAP panel and the Guardian Forum on how to replicate the success of m-Pesa.

The second approach, suggested by Scarlett from *UNCTAD*, was that m-finance education should be incorporated into wider ICT education programme workshops in order that the benefits of banking are integrated into other factors such as developing business and e-commerce skills through women entrepreneur workshops. In contrast Mike from the *Helix Institute* argued that the term... *"consumer education"* is wrong and that many of the expensive financial literacy programmes have not been successful and... *"the days of sitting poor people down on school benches and lecturing them on how to save are (or should be) over"* (Mike McCaffery, Discussion 6 , 2015). Instead Mike advocates that to build knowledge, efforts should be directed into marketing campaigns which he supports by citing the success of the m-Pesa marketing strategies. A similar tactic is advocated by Yasmina and Graham in the 2012 webinar as they argue that for low-income communities to reach the 'knowledge' stage of the customer journey, below-the-line (BTL) marketing strategies should be used which can be channelled through agents.

Lastly Rohini from *Harvard University* commented that in her experience when women attended training sessions along with their friends they tended to gain more out of the experience. This suggests the important role that a person's social network plays in gaining new knowledge which was similarly advocated by Graham in the 2012 GSMA webinar when he said... *"learning through peers and word of mouth plays an important role in spreading financial education amongst poor illiterate customers"* (Graham Wright, Discussion 1, 2012). Therefore, four approaches of how to educate low-income groups about m-finance emerge from the discussions; firstly through mobile agents, secondly through workshops, thirdly through marketing, and lastly by tapping into social networks.

Not only was there a variety of responses in how to tackle financial literacy but the types of literacy that were deemed as most necessary for low-income communities similarly produced a number of views. Firstly, in the *BTCA* presentation in 2014, Jamie Zimmerman nicely identifies three types of literacy which are relevant for m-finance. Firstly, literacy itself which refers to the ability to read and write; secondly financial literacy which is understanding how money works and understanding concepts such as saving, insurance and credit; and thirdly, programme literacy which is understanding how the m-finance platform works and the fees and processes that are a part of the service. For Rohini from *Harvard University* it is financial literacy which she deems as most important for low-income communities as she argues that what is critical is... *"increasing financial literacy so that customers know what products would be beneficial to them"* (Rohini Pande, Discussion 7, 2015). However, in contrast to this Graham from *MicroSave* and Yasmina from the *GSMA* argue that low-income users are aware of the benefits, but they do not have a good understanding of how the programmes work which prevents them from using the services due to a lack of trust in both the service and their own abilities. Graham states... *"it's not financial education that customers necessarily need… they need practical, proven, knowledge-based ideas based on experiential learning"* (Graham Wright, Discussion 1, 2012). A similar argument is put forward by Jamie in Discussion 4 as she draws on experience from Kenya where after a 13-week financial literacy training programme the target group were still unaware how the platform worked and what fees they needed to give local agents. Secondly, in Uganda, Jamie reported that users would tell agents their private pin numbers as they did not know that their pins were there for their protection and privacy. This indicates that it is vital that m-finance education programmes take into account programme literacy. However financial literacy should not be seen as redundant as it is important that low-income groups are provided with the opportunity to have a comprehensive understanding of finance as opposed to just the amount of knowledge MNOs see as appropriate to make their services a success.

Other remarks related to the consequences of low-income users not having sufficient knowledge, which leads to reliance on over-the-counter (OTC) models. OTC models are when users will visit an agent to make the transaction on their behalf. In the *CGAP* panel and both Guardian online forums the reliance on OTC models was discussed negatively and viewed as inconvenient to the user. However, some m-finance platforms are designed deliberately in this way such as Easypaisa in Pakistan which was advocated by Abraham in the 2012 Mobile Money Summit as he claimed it was a way to build trust over time and to ensure that it is a profitable business model. This indicates a key finding – m-finance is argued to take a pro-poor approach which favours involvement and seeks to empower, but the decision to prioritise OTC models defies this. Therefore, whilst Seema from the GSMA asked Abraham to justify the reasons why Easypaisa took this approach (which reveals the negative way OTC models are viewed by a number of practitioners) there still remains a clear tendency within the industry of seeing low-income users primarily as consumers where profits might be prioritised over their real needs.

Inactivity of Low-Income Groups in m-Finance

The literature suggests that it is not often low-income groups that benefit from m-finance innovations, in spite of donors and financial institutions justifying the resources being spent in this area as a way to generate financial inclusion for the unbanked (Donovan 2012). The concern of low-income users not using m-finance platforms was described in the discussions as 'inactivity'. This was measured as a high number of those registering for access to m-finance services, but then not using the services. The degree to which this problem was acknowledged by the panellists varied throughout the discussions with some choosing to cite the number of registered users of m-finance, painting a positive image, whilst others drew attention to more realistic figures on actual usage.

In Discussion 6, Alix from *World Remit* cites the *GSMA* deployment tracker[7] stating there are 261 live m-finance deployments in response to a question asking for other examples of

[7] The GSMA deployment tracker records the number of live and planned m-finance deployments which target the unbanked. It is available at http://www.gsma.com/mobilefordevelopment/m4d-tracker/mobile-money-deployment-tracker

success outside of Kenya. Alix appears to be suggesting that these other live deployments carry equal weight in their country of deployment, as m-Pesa does in Kenya, which is not supported by the evidence (De Albuquerque et al 2016; Heeks 2012; Mas & Morawczynski 2009). The GSMA deployment tracker is similarly referenced in Discussions 2 and 3 again portraying an overly positive view of the growth and development of m-finance. In response to Alix, Mike from the *Helix Institute* argues that often figures are abused and states that... *"only 12.8 million Kenyans are active M-Pesa users… not the 19 million that have registered that most people quote"* (Mike McCaffery, Discussion 6, 2015). Annabel from *MicroSave* agrees and adds that the average transaction conducted through m-Pesa is US$70 which she argues indicates that it is not used for everyday transactions by low-income users. Likewise in Discussion 5, Michelle states that 91 percent of m-finance accounts in West Africa are not used on a regular basis. In contrast, Gerhard from *CGAP* responds by arguing that in reality a huge number of low-income communities are not registered at all with 60 percent of potential users not completing registration (due the type of challenges set out in section B of this paper), and that this must be addressed in advance of concerns over inactivity. Finally, the concern of inactive registered users was commented upon in Discussion 1 by Yasmina, indicating that the problem of inactivity was not a new concern. Despite some comments during the discussions which attempt to give an overly positive view of the progress of m-finance for low-income groups the majority of respondents acknowledge that figures are often distorted and inactivity among the poor is a growing concern.

D.2 Secondary Themes

Developing and Maintaining Trust
Factors concerning trust were not deliberated explicitly by the panellists, but instead were linked to other issues. For example, the dependence on OTC models among many low-income users was linked to users not having enough trust in their own capabilities by Caitlin from *BFA* in the CGAP panel. Secondly, agent liquidity issues were linked to the lack of trust low-income users had in m-finance services which resulted in funds being withdrawn immediately after receiving a payment. Lastly, the impact that social networks can have on a user's trust of m-finance was discussed by Graham and Yasmina in the *GSMA* webinar where if one user had a negative experience this could lead to mistrust spreading among their social network.

Customer Protection and Fraud
Concerns over fraud were brought up in Discussions 5 and 6, but the extent to which it was a concern for low-income groups differed. In the CGAP discussion, Michelle argued that actual incidences of fraud were low but that the poor's reliance on word-of-mouth made incidences of fraud appear more prevalent. However, in response, Michelle Kimathi from the *Helix Institute* argued that they have found substantial evidence of fraud being committed by providers misusing data especially in East Africa. A similar point was identified by Mike (also from the *Helix Institute*) in the Guardian m-Pesa discussion who stated that... *"fraud is much more common than people are willing to admit"* (Mike McCaffery, Discussion 6, 2015). In response to Mike's comment, both Amitabh from *Digital Disruptions* and Scarlett from *UNCTAD* argued that fraud is prevalent in all financial sectors, but that it is manageable so is not a key concern. While the prevalence of fraud may be

debated, the reliance on word-of-mouth among low-income users indicates that efforts should be made to ensure fraud is reduced and that customers are protected. Finally, fraud was similarly mentioned in relation to agents with the need to introduce penalties and increase monitoring.

Customer Service

The role of customer service in hindering or helping m-finance was deliberated in Discussions 1, 4, and 5 with its importance seen as a key factor for the implementation of a new platform. Yasmina from the GSMA stated... *"customer service is key… it helps to retain customers, helps cross-sell products and build word- of-mouth business"* (Yasmina McCarthy, Discussion 1, 2012). Moreover, Jamie from *BFA* argued that the provision of a customer service helpline is not only valuable for the user, but it also helps... *"programmes to learn about what is happening on the ground"* which enables programmes to make improvements where needed (Jamie Zimmerman, Discussion 4, 2014). However, in the *CGAP* 2015 Panel it was found that the inadequate quality of customer service presents a greater barrier than benefit to low-income users due to long waiting times and the poor quality of information provided by help lines. Moreover, Kimathi from the *Helix Institute* stated that for many poor users the need to call customer service help lines is one of their greatest fears.

Affordability

The costs associated with m-finance for low-income communities were addressed in terms of fees and the need to ensure they are clear so that users know why and how much they need to pay. This was discussed in the *CGAP* 2015 discussion with the emphasis being on the need for transparency as opposed to lowering costs of fees. The only panellist to address the external costs of m-finance was Shaibu from *MTN Uganda* in the 2012 Mobile Money Summit. Shaibu explained that MTN recognised not all of the unbanked can afford or access a mobile phone and therefore were implementing m-finance type programmes through local village phones and payphones. This shows recognition of the varying levels of income among low-income users and the need to tailor financial inclusion products to ensure they are inclusive.

Effective Network Agents

The vital role that agent networks play in the implementation of m-finance for low-income communities was discussed. For example, Stone the co-founder of *Remit* in Uganda, states that... *"the mobilisation of mobile money agents is extremely important for a successful deployment"* (Stone Atwine, Discussion 6, 2015). The number one concern which emerged from the discussions was the problem of agent liquidity whereby agents do not have enough cash to meet the demands of the users. This is a serious issue, as many developing countries are still cash dependent (Alampay & Bala 2010). Michelle from *CGAP* discussed two negative effects this can have on low-income groups; users not being able to access money in emergency situations and users having to pay multiple transaction fees as they have to visit multiple agents to withdraw the cash they need. Both of these, Michelle argues, can lead to abandoning the m-finance platform. Moreover, Michelle further adds that often G2P payments occur on the same day, which results in large numbers of users wishing to withdraw cash at the same time. Ruth from MasterCard supports this, arguing that... *"liquidity management is crucial as it drives trust and reliability of service for customers"* (Ruth Dueck-Mbeba, Discussion 7, 2015). In order to improve the liquidity of agents the only recommendation put forward in the discussions is to have a re-design of the business models.

Discussions 1, 2, 5, 6 and 7 argued for the need to incentivise agents. Gavin from *Visa* testified that... *"the critical thing for successful agent networks is profitability for the agent"* (Gavin Krugel, Discussion 7, 2015). Gavin goes on to explain that it is crucial to incentivise agents so that they not only register new users, but make sure that users are educated and aware of how the product works to ensure that they remain active users. In addition to the need to incentivise agents, the challenge of how to monitor and manage agents was a concern which emerged from a number of the panellists. Lastly, Robert from *Oxford Policy Management* (Discussion 7) warns that due to the high numbers of agents in Kenya the market has become overly saturated, and therefore, it is harder for agents to be profitable – so the numbers of agents should be carefully monitored.

Infrastructure

The concern over weak infrastructure was directly addressed only in one discussion which came from CGAP's 'Doing Digital Finance Right' where infrastructural challenges were linked to a lack of trust and increased risk for low-income users. Firstly, increased risk was argued by Michelle from *CGAP* who stated that during network downtime, users would leave money with agents for them to complete transactions when the services were live again. This increased the chances of fraud as well as the chance of mistakes being made if agents had multiple transactions to complete. Moreover, if users made transactions themselves, and the service cut out, it often led to secondary transactions being made in error which was argued to negatively affect trust as the system was perceived as unreliable. Moreover, Michelle argued that... *"network downtime is the top concern of consumers"* and therefore requires more attention (Michelle Kaffenberger, Discussion 5, 2015). The research conducted by *CGAP* concluded that in order to improve infrastructure, competition should be encouraged among MNOs and m-finance deployments so that more investments could be made in improving service quality. However, if as *CGAP* note, weak infrastructure is a main concern for low-income users, then private investments from the donors could greatly improve this critical challenge.

The table below presents a summary of the challenges and best practice recommendations as discussed from the participants in the discussions.

Table 2. Summary of Challenges and Best Practice of Donor Organisations

Challenges	***Best Practice***
Lack of Focus on Social Norms and Local Context	
● Reliance and influence of social networks ● Local context is complex ● Preference for face to face contact ● There is no 'one size fits all' approach	● Actively acknowledge local preferences ● Use agents to retain 'human touch' ● Donors and NGOs should strengthen their local knowledge ● Tailored marketing campaigns to meet local needs and preferences
Lack of Knowledge and Financial Illiteracy	
● Lack of financial literacy results in low-income users not knowing what products best suit their needs ● Lack of programme literacy results in low-income users not understanding how to use m-finance platforms ● Lack of trust in user's own capabilities results in an over-reliance on OTC models	● Agent networks to assist in educating users in practical programme knowledge and financial literacy ● Broad ICT education workshops which include commerce and business skills as well as m-finance training ● Marketing campaigns to educate new users on why and how to use m-finance services ● Encouragement of peer learning within communities
Inactivity of Low-Income Groups	
● High numbers of low-income consumers register to use m-finance services but do not become active users ● New users fail to complete registration for m-finance services	● Ensure registration is as simple as possible ● Encourage users to make their first transaction upon registering to encourage continued use of the service ● Incentivise agents to ensure existing m-finance users make use of the m-finance services rather than focusing on registering new consumers
Developing and Maintaining Trust	
Developing and maintaining trust is vital in encouraging the adoption and use of mobile financial services. From the discussions it was evident that trust is an embedded issue among the other themes identified (both primary and secondary), and therefore challenges and best practice for the development of trust should be considered as a cross-cutting issue in each of the identified themes.	
Customer Protection and Fraud	
● Word of mouth intensifies fear of fraud ● Misuse of consumer data ● Fraudulent behaviour committed by agents	● Increase monitoring of agents ● Have repercussions for fraudulent behaviour
Customer Service	
● Poor quality of customer service ● Consumers dislike contacting customer service	● Improve training for customer service staff ● Reduce call waiting times for customer service help lines
Affordability	
● Reason for paying fees are not always clear ● There are varying levels of affordability among the poor	● Increase transparency of fees and charges ● Develop m-finance products through shared phones to include those who do not have personal access to a mobile device
Network Agents	
● Liquidity of agents cannot always meet the needs of users ● Lack of effective training ● Lack of effective monitoring	● Incentivize agents in a way that not only rewards registration of new users but also encourages agents to ensure current customers remain active ● Improve training and monitoring

	● Limit the number of agents to ensure the market does not become overly saturated ● Stagger G2P payments to help reduce sudden demand for cash ● Re-design business models to improve liquidity challenges
Infrastructure	
● Service downtime disrupts transactions ● Increased risk of fraud and mistakes ● Unreliability of m-finance discourages use	● Increase competition to encourage investments to improve services

E. Donor Priority Misalignments

Evidence from the analysis suggests that there are some misalignments between the priorities of the donors and the needs of low-income communities.

Definition and measurement: the way that financial inclusion is measured and discussed indicates a misalignment between donors and the needs of low-income users due to registration for a service often being defined as financial inclusion. Reeves & Saharwal (2013) criticise the development of mobile-finance as they argue that efforts have been on registering new users as opposed to educating and generating awareness of how the services can be used properly. This is similarly evidenced in the discussions with panellists, noting that often the numbers of active users and financial inclusion are exaggerated. However, overall the panellists argue that being registered for a service does not equal financial inclusion, and despite publications from donors and NGOs indicating otherwise, there is at least an awareness of this, but not necessarily in the practice of assembling the data.

Knowledge and literacy: the emphasis from the donor perspective appears to be on programme literacy despite evidence showing that financial literacy is equally important. Research conducted into the demand-side of financial inclusion showed that financial literacy is crucial for low-income users so that they can understand both the risks and the rewards associated with m-finance, and make informed decisions (Kundu 2015). Financial illiteracy is one of the main barriers facing m-finance implementation among low-income populations. Research conducted in South Asia found that this is because m-finance is viewed as something that better-off urban populations use, is not considered relevant or applicable by low-income rural populations, and that informal saving and lending groups did not see themselves as eligible for m-finance (Zainudeen & Ratnadiwakara 2011; Dass & Pal 2011). This perception is reinforced due to the higher number of mobile agents in populated and affluent areas as opposed to rural and poor districts (Ryder 2014; Ivatury & Mas 2008). The role that agents can play in educating low-income communities is deliberated in the discussions, yet the use of agents brings its own set of challenges such as training, fraud and liquidity issues.

Affordability and access: whilst a low-income user may have access to or ownership of a phone this does not mean the phone is used, as usage depends upon the ability to charge the phone, to purchase credit or not losing the device which all affect whether a user has continued access or not (Chib et al. 2015; Potnis 2014). This is supported by Reeves & Saharwal (2013) who show that the less-well-off devote a significant proportion of their income to maintaining mobile phones and the additional costs of using m-finance are a substantial barrier. From the online discussions the focus was on the need for transparency with only one participant addressing the affordability of m-finance for low-income groups which suggests a potential oversight on behalf of some donors.

Lack of affordability is compounded by weakness in infrastructure serving low-income communities. This has been confirmed by the GSMA in their recent state of the industry report which found that the uptake of m-finance in rural areas is very low, largely due to infrastructure challenges (GSMA 2015a). Having a developed infrastructure is necessary for cash-in/cash-out points, to power mobile phone towers, to ensure network coverage and to charge mobile devices. Moreover poor standards of transport and roads make it harder for local mobile agents to move about, and to be recruited and trained (Klapper & Singer 2014). Despite the critical challenge that infrastructure plays in the implementation of m-finance, it was only directly discussed in CGAP's 'Doing Digital Finance Right' discussion. In order for m-finance to be more successful it may be necessary for donors to give more consideration to the infrastructural challenges which low-income communities face.

Risk and reward: m-finance is argued to benefit low-income communities as it reduces risk and is a safer way to transact money (Kikulwe et al. 2014; Chib et al. 2015). However, it became increasingly evident in the online discussions that there are a number of new risks that low-income users face when adopting the new technology. For example, chances of fraud, theft after visiting an agent, misuse of personal data, lottery scams, inaccessibility of cash, and the chance of delayed or erroneous transactions. Moreover, the reliance on word of mouth can result in risks being misunderstood or perceived as a stronger threat than they are in reality. For example, in rural Uganda, many low-income groups said they thought banks were cheaters due to their charges with 27 percent claiming this was due to stories they had heard from friends and family (Ryder 2014). The possibility of new risks was considered openly by the participants in the discussions; however it is vital that transparency around both risk and reward are continued when donors implement m-finance projects.

Profits and power: within the panel discussions there was a mixture of those that expressed the importance of profits and those that prioritised the needs of low-income users. Profitability in itself is not a negative component as it encourages the chances of sustainability, but the desire for profits must be balanced with meeting the needs of low-income users. Arora & Romijn (2012) criticise m-finance for failing to consider the unequal power relations which exist on the ground. This refers to the fact that among low-income communities there exist unequal power relations which drive the development of new innovations and often donors and NGOs fail to recognise this, and instead see the poor as 'an essentialised mass of undifferentiated people' (Arora & Romijn 2012:9). Often, donors and NGOs do not recognise the powerful position they hold in the way that m-finance is developed. Evidence of this can be seen within the discussions, as although the need to consider local preferences and needs are recognised, there were no elaborations on how this should be achieved, or recognition of the unequal power relations that exist between donors and beneficiaries.

F. Conclusions and Policy Guidance

This working paper has synthesised the challenges and recommendations of implementing m-finance for low-income communities from the views presented in a set of online panel discussions and webinars. The study brings together a range of ideas which may be useful for practitioners and donors to consider. Moreover, the discussion on the misalignments between donor polices and the needs of low-income users sheds light on the concern of inactivity among low-income users, as the misalignments may provide at least part of the explanation.

The most pressing challenges from the point of view of the donors and practitioners related to financial literacy, effective agent networks, the complex nature of social norms and networks, improved infrastructure, increased transparency for affordability, fraudulent behaviour and customer protection due to misuse of personal data. From the evidence collected and analysed it is clear that there are many approaches to mitigate the challenges faced when implementing m-finance for low-income communities, and there is no one correct answer. The unique local context and norms of low-income communities, and the diversity that exists within them, show that a blueprint for implementation cannot be given. However, there are common challenges and recommendations which can be recognised and efforts should be made to acknowledge these and improve the implementation of m-finance so that it better meets the needs and preferences of low-income users. There is some evidence that donors continue to adopt a top-down 'poor as consumers' mind-set towards the implementation of m-finance in practice, whereas within the academic literature there was a consensus that more efforts should be placed in working alongside low-income users to prioritise their needs.

In order for the implementation of m-finance to be more successful for low-income groups and individuals, donor/industry-driven initiatives need to be combined with bottom-up approaches which are focussed on the understanding of differentiated local contexts and norms in the way they are enacted. In this way the poor in developing countries can not only have access to the resources and investments they require for m-finance platforms, but also a sense of ownership and control over the way in which m-finance initiatives are developed from the ground up.

Seven key recommendations are made for donors with respect to developing policies and approaches that are more closely tailored to the needs of low-income users:

- In order for m-finance to be more applicable and appropriate to low-income users, donors must ensure transparency when implementing new innovations and make it clear that m-finance delivers both benefits and risks. This way, low-income communities can make more informed decisions as to whether new products are beneficial to them or appropriate for their needs.
- When addressing financial literacy and knowledge barriers to uptake, donors should ensure that both financial and programme/platform literacy are included within m-finance deployments.

- The affordability of m-finance differs among low-income communities in developing countries. Therefore, donors should strive to have an awareness of both the direct and indirect costs of m-finance platforms to ensure they are an affordable option for communities. In some cases, m-finance schemes may not be the most appropriate way to foster financial inclusion.
- Infrastructural challenges are a principal reason for high inactivity among low-income communities. For this reason, it is vital that donors assess the reliability of the services they are implementing and where possible work to improve the infrastructure so that reliable services may be implemented.
- Donors must acknowledge the unequal power relations that exist both between themselves and the beneficiaries, and in relation to power dynamics within and between communities. By doing so it can help to ensure that the needs of all those in low-income communities are considered when implementing a deployment.
- There are both top-down and bottom-up approaches to the implementation of m-finance which can be followed. By ensuring that the implementation is not solely top-down and more efforts are placed in bottom-up approaches, it is premised that this may help to ensure that the implementation is more applicable to low-income groups.
- Local context should always be considered when addressing how to make m-finance more applicable and usable for low-income users, as it is important that low-income communities are not seen as a homogenous group.

Finally, working alongside low-income communities is crucial to ensure that local needs and practices are addressed. However when implementing m-finance initiatives from the ground up it is important that donors and development professionals consider the politics of participation and the unequal power relations which exist on the ground. The top-down approach which is typical of m-finance tends to reinforce these unequal power relations. A bottom-up approach that develops agent networks in rural and remote areas can also build upon the power of social networks to strengthen financial literacy awareness and knowledge for low-income users.

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Appendix

Discussion 1
Webinar held by GSMA 'Marketing Mobile Money: Top 3 Challenges', 2012
http://www.gsma.com/mobilefordevelopment/programme/mobile-money/marketing-mobile-money-top-3-challenges

The webinar is hosted jointly by MicroSave and GSMA and discusses the marketing challenges when implementing m-finance at the BoP. The three main challenges presented by Graham and Yasmina are the need to market to specific groups in order to tailor m-finance marketing strategies, the challenge of the customer journey to accept m-finance and finally the need for above the line (ABL) and below the line (BTL) marketing strategies to be used in different stages of m-finance implementation.

Participants	*Affiliation*
Graham Wright	Group Managing Director at MicroSave– a technical service provider to financial institutions in Asia & Africa
Yasmina McCarthy	Commercial Director of Mobile Money for the Unbanked at GSMA

Discussion 2
Panel discussion at the Mobile Money Summit hosted by GSMA, 'Exploiting Opportunities for Mobile Money in Untapped Markets', 2012
http://www.gsma.com/mobilefordevelopment/uncategorized/exploiting-opportunities-for-mobile-money-in-untapped-markets-nfc-mms-2012

The Mobile Money Summit is a conference which brings together the key players in the mobile, financial and development sectors to discuss the latest developments and trends within mobile-finance. The discussion was focused on business models and marketing approaches and the panellists are mostly concerned with how to make mobile-finance profitable which is reflected in the title of the discussion. This approach to m-finance reflects the BoP1 approach which was highlighted in the literature review where the poor are seen primarily as consumers and the focus is on profits rather than financial inclusion. The panel was moderated by Seema Desai from the GSMA who addressed individual questions to each panellist. The questions were mostly centred on the different m-finance deployments and where panellists saw them expanding in the future.

Participants	*Affiliation*
Seema Desai	Head of Mobile Money for the Unbanked at GSMA
Abraham Foss	Senior vice president and head of financial services at Telenor – an international provider of tele-, data and media communication services
Shaibu Haruna	General Manager for sales and customer services for MTN Uganda – a mobile payment service deployed in Africa
Chidi Okpala	Director of Airtel Money Africa – mobile money service deployed in Africa
Francis Matseketsa	Head of mobile money at Econet Wireless Zimbabwe – telecommunications provider
Joshua Rush	Vice President of Vesta – an electronic payment solution company

Discussion 3
Panel discussion at the Mobile Money Summit hosted by GSMA, 'Riding the Rails of Mobile Money', 2013
http://www.gsma.com/mobilefordevelopment/uncategorized/riding-the-rails-of-mobile-money-mmu-seminar-at-nfc-mms-2013

A second discussion from the Mobile Money Summit was chosen for analysis which was similar in nature to the discussion above. This panel discussion at the Mobile Money Summit in 2013 was moderated by Camilla from the Grameen Foundation and was centred on new innovation within mobile-finance to increase successful deployments.

Participants	*Affiliation*
Camilla Nestor	Vice President of Financial Services at the Grameen Foundation
Jonathan Hakim	President and CEO of cignifi – a data company which helps to deliver financial services to the unbanked
Fatima Popal	Head of Mobile Service Development for M-Paisa, Roshan – mobile money and payment solution deployed in Afghanistan
Moinuddin Raghi	Head of Finance at BKash – mobile financial service provider in Bangladesh
Elio Vitucci	CEO of Experian MicroAnalytics – organisation that supports the development of financial services in developing countries

Discussion 4
Presentation by the Better than Cash Alliance (BTCA), 'Designing e-Payments for the Poor: the Importance of Recipient Communication Channels', 2014
https://www.youtube.com/watch?v=2mA_t2_3YuA

The presentation by BTCA was hosted by Jamie in collaboration with CGAP and presented conclusions made from recent research as to how e-payment platforms for the poor should be designed. The two key takeaways Jamie presents are the need for the BoP to be aware of how m-finance programmes work and ensuring there is a two-way communication channel for the BoP and m-finance provider.

Participants	*Affiliation*
Jamie Zimmerman	Senior Associate at Bankable Frontier Associates and Researcher for BTCA and CGAP

Discussion 5
Presentation and Panel Discussion hosted by CGAP, 'Doing Digital Finance Right', 2015
http://www.cgap.org/events/doing-digital-finance-right

The CGAP workshop held in June 2015 brought together expert panellists to discuss the challenges that the poor face when using m-finance. Global research that had been conducted by CGAP was firstly presented before opening the discussion up to panellists and then taking questions from the floor. CGAP conceptualised the challenges in terms of risk and presented recommendations which consisted of improving service reliability, making interfaces more user friendly, strengthening agent quality, combating fraud and improving customer service. The panel was dominated by CGAP employees (note that Caitlin Sanford also undertakes research for CGAP) and therefore there was not a lot of diversity within the discussion.

Participants	*Affiliation*
Michelle Kaffenberger	Senior Research Consultant at CGAP
Jamie Zimmerman	Senior Policy Consultant at CGAP
Kimathi Githachuri	Principal Consultant of the Helix Institute – provides assistance to extend financial services to the unbanked
Caitlin Sanford	Director of Bankable Frontier Associates – consulting company which helps support the development of financial services for the unbanked
Gerhard Coetzee	Senior Financial Sector Specialist at CGAP

Discussion 6
Live online forum held by the Guardian, 'Mobile Money: Why isn't the M-Pesa effect Hitting More Countries?' 2015
http://www.theguardian.com/global-development-professionals-network/2015/apr/16/mobile-money-m-pesa-india-kenya-development

The Global Development Professionals Network from the Guardian hosts live online forums between development professionals to discuss trending issues. In April 2015 mobile-finance and development professionals were brought together to discuss why more countries haven't seen the same success as in Kenya. The forum included a wide range of participants which led to an interesting and varied discussion. Panellists were keen to point out other countries where there has been evidence of successful m-finance deployments and stressed the important role that agents played in Kenya.

Participants	*Affiliation*
Natalie Baatjies	Senior Director for Financial Inclusion at Visa – financial services corporation
Stone Atwine	Co-Founder of Remit, Uganda – Mobile money deployment in Uganda
Rajiv Bhatia	Head of Mobile Commerce Sales, Ericsson – multinational provider of communication technology
Nambuwani Wasike	Research Associate at Centre for Financial Inclusion (CiFi), Kenya, - think tank working towards enabling financial inclusion
Greg Reeve	Chief Operations Officer, Mobile Financial Services at Millicom – telecommunications company
Scarlett Fondeur Gil	Economic Affairs Officer, United Nations Conference on Trade and Development (UNCTAD)
Alix Murphy	Senior Mobile Analyst, WorldRemit – mobile money deployment
Amitabh Saxena	Managing Director of Digital Disruptions – advisory service on digital literacy, mobile money and product innovation
Mike McCaffrey	Principal consultant, Helix Institute - provides assistance to extend financial services to the unbanked
Maria May	Senior Programme Manager, BRAC, Bangladesh – development organisation
Annabel Schiff	Senior Manager of Digital Financial Services at MicroSave

Discussion 7
Live online forum held by the Guardian, 'Where do we Build Banks Where None Exist?', 2015
http://www.theguardian.com/global-development-professionals-network/2015/may/14/live-qa-how-do-we-build-banks-where-none-exist-financial-inclusion-developing-countries

Discussion 7 similarly came from the Global Development Professionals Network and consisted of a range of professionals with different backgrounds and experiences. The focus of the discussion was how mobile technology could bring financial inclusion to the unbanked as well as debates around what the real needs of low-income groups are and how best to meet these needs.

Participants	*Affiliation*
Rohini Pande	Professor of Public Policy, Evidence for Policy Design (EPoD), Harvard University
Nicholas Dove	Financial Policy Consultant, John Howell & Co – provides consulting services
Ruth Dueck-Mbeba	Programme Manager for Financial Inclusion at the MasterCard Foundation
Lisa Kienzle	Global Director of Financial Services, Grameen Foundation, Philippines
Robert Stone	Associate Consultant, financial sector development, Oxford Policy Management – international development consulting firm
Javier Borkenztain	CEO of $ERO Electronic Money – financial services organisation
Lauren Hendricks	Executive Director for the Access Africa initiative, CARE International UK – international development organisation
Thea Anderson	Senior Advisor for Financial Inclusion, Mercy Corps – international development organisation

Stephen Schuster	Senior Financial Sector Specialist, Asian Development Bank
Sergio Navajas	Senior Specialist, American Development Bank
Gavin Krugel	Vice President of Visa, South Africa