

A METHODOLOGICAL PERSPECTIVE ON MOBILE BANKING FOR G2P PAYMENTS IN PAKISTAN

Research Paper

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ABSTRACT

This paper aims to fulfil the methodological gaps that are prevalent within mobile banking (m-banking) practices in the government-to-person (G2P) payment sector in developing countries. By drawing upon the interpretive and social constructionist stance that underpins the theoretical framework, it highlights how the case study methodology guides a qualitative approach for data collection in the study. Hence, an interpretive case study of the Benazir Support Programme in Pakistan, provides a holistic view of m-banking practices from both programme designers as well as women user's perspective. We discuss how an interpretive methodology 'constructs' social realities around mobile banking for individually 'enabling' and 'constraining' G2P payments, and its impact on financial inclusion for socio-economic change within households. To conclude, we argue why financial education, and training is important for 'capabilities development' in the financial inclusion agenda to eradicate poverty in Pakistan.

Keywords: mobile banking, G2P payments, interpretivism, case study, Pakistan

1. INTRODUCTION

Whilst recently there has been significant interest and efforts in leveraging mobile banking (m-banking) for dispensing government-to-person (G2P) payments in developing countries, however, paucity remains on the opportunities and challenges that m-banking provides for financial inclusion (Rotman, 2011; Bold, Porteous and Rotman, 2012). As the majority of the population remains financially marginalised, the exponential growth of mobile technologies has enabled banks to deliver financial services to 'unbanked' populations, via m-banking (Omole, 2013; Morawczynski, 2009). Therefore, m-banking provides a viable channel in connecting the poor to the banking system to reduce the 'financial divide' between the rich and poor (Ayanso, Cho and Lertwachara, 2014).

Although m-banking has become popular for rapid development in emerging economies, the majority of studies have largely overlooked the developmental impact for 'transforming' the financial landscape in poor communities (Duncombe and Boateng, 2009). Qureshi (2014) argues that it is pertinent to investigate the impact of m-banking in delivering financial services, but more importantly, to understand the context in which mobile technologies are constructed and 'embedded' to 'enable' and 'constrain' users. Hence, it is vital for the research community to identify the ontological nature of the m-banking artefact related to its construction that affects usage and impact. Researchers need to clarify their philosophical stance that determines the specific methodology for using the appropriate methods for data collection at the practice level. Hence, we emphasise that the philosophy, methodology and methods need to be closely entwined for a coherent framework for any study.

Current research on m-banking in developing countries fails to provide a diagnostic account of the critical issues that affect usage of m-banking at the micro-level. Also, most of the literature is technological deterministic based on the optimism that m-banking innovation can create. Hence, there is scant research available from developing countries that critically analyses various m-banking practices, in particular, government-to-person (G2P) payments for financial inclusion in poor households. Whilst in the past, m-banking research mainly focussed on money transfers; person-to-person (P2P) and person-to-business (P2B) payments, the role of m-banking in the Government sector has so far been undocumented. Moreover, whilst several models of m-banking have been investigated from other developing countries, we find that Pakistan, with a high mobile penetration rate exceeding 74%¹, and with established m-banking programmes, has been under represented in current studies.

¹ www.pta.gov.pk/

Walsham (1995, 2006) contends that previous Information Systems (IS) research lacks the vigour, form and practice within the interpretive frame. In order to address the gaps in the literature, this paper will highlight the importance of a philosophical orientation that locates the research within the interpretive paradigm of inquiry. Hence, the aim of this paper is to provide an interpretive analytical framework to access digital G2P payments in Pakistan. The philosophical stance steers our case study methodology and helps to investigate how m-banking 'enables' and 'constrains' programme designers and women users within the G2P payment sector in Pakistan. Also, how technological innovation affects the institutional properties in households leading to financial inclusion in Pakistan.

The paper is structured as follows. Section 2 provides a brief overview of m-banking models and practices in developing countries and highlights the methodological gaps in the literature. This is followed by the philosophical orientation of the study in section 3 that justifies the choice of the theoretical framework, Orlikowski's Duality of Technology. Section 4 reflects upon the methodology, case study of the Benazir Income Support Programme (BISP) in Pakistan for qualitative analysis. In section 5, we discuss our findings. We conclude in section 6 by suggesting how hybrid analysis discovers emergent themes to enrich our existing understanding of m-banking and helps in constructing new concepts for theory building as contribution to knowledge.

2. MOBILE BANKING IN DEVELOPING COUNTRIES

2.1. Mobile Banking Models and Practices

M-banking, in developing countries, is facilitated by branchless banking that extends the outreach of financial services to the unbanked residing in remote underserved regions (Demombynes and Thegya, 2012; Mas, 2009; Ivatury and Mas, 2008). The model deploys the conversion of 'virtual money' in mobile phones into physical cash, and vice versa, through 'banking agents' acting on behalf of banks (Mas and Kumar, 2008; Donner and Tellez, 2008). Banking agents are more accessible to rural communities where traditional bank branches are absent, either due to infrastructural deficits, or high costs (Mas, 2009).

Focusing on developing nations, several models of mobile banking have been critically analysed in Africa, especially in Kenya (M-PESA), Tanzania (M-PESA) and South Africa (WIZZIT). From Asia, there are studies available from Philippines (SmartMoney and G-Cash), India (Eko) and Bangladesh (bKash and Dutch Bangla Mobile) but sparse research from Pakistan. Whilst research on M-PESA from Kenya and Tanzania reveal that mobile operator-led models dominate (Ivatury and Mas, 2008; Mas and Ng'weno, 2010), however in South Africa, partnership-led (MTN money) or third party-led models (WIZZIT) dominate the m-banking landscape (Mas, 2009). Moreover, in Philippines, the mobile operator-led model G-Cash, is more popular than SmartMoney that is partnership-led (Ndiwalana and Popov, 2008). In contrast, bank-led models dominate the South Asian landscape, particularly in India, Bangladesh and Pakistan that offer fewer access points with limited inter-operability (CGAP, 2012; Chen, 2012; Mishra and Bisht, 2013). Therefore, every country experiences the evolution of a model that is subject to its prevailing socio-economic and political environment (Mishra and Bisht, 2013).

Most studies from practitioners provide valuable insight of current m-banking practices. The literature from Kenya, Tanzania and Philippines reflects that the majority of m-banking practices constitute mobile transfers in the form of person-to-person (P2P) payments (Morawczynski, 2009, 2011; Heyer and Mas, 2009; Mas and Radcliffe, 2010). In Latin America, particularly Brazil, and in South Asia, such as Pakistan and Bangladesh, over the counter person-to-business (P2B) transfers are exclusive amongst male users. Although there is significant increase in the outflow of government-to-person (G2P) payments or digital transfers, via mobile phones, (Mas, 2009; Chen, 2012; Bold, 2011), we find that there is scant research available pertaining to G2P payments as perceived by both designer's and user's. Thus, we argue that m-banking research lags behind on how G2P payments enable and constrain technology designers and users, and the transformational impact on the social and economic landscape in underdeveloped communities.

2.2. Gaps in Methodological Literature

Majority of m-banking studies were framed around policy reports and business documents prepared for policy/regulatory institutions, business enterprises and private organisations in developing countries (Demombynes and Thegya, 2012; Mas, 2009; Mas and Morawczynski, 2009; Comminos et al., 2008). Such studies were based on business models for profit maximisation, increasing revenues, extending distribution channels, or innovative product designs (Canner and Sjoblom, 2009; Jenkins, 2008). Therefore, academic research on m-banking was relatively scarce with the need to drive research beyond design and implementation towards a more humanist perspective.

Further, from a philosophical standpoint, majority of empirical research on m-banking was situated within the positivist paradigm, relating to the use of quantitative methods (Mbogo, 2010; Jack and Suri,

2011). Although quantitative methodologies represented larger population samples, there was lack of in-depth analysis on m-banking issues that failed to connect the study to the social, organisational and environmental context (Mas and Ng'weno, 2010; Ngugi, Pelowski and Ogembo, 2010; Jack, Suri and Townsend, 2010). Alternatively, few studies were based upon the 'interpretive' philosophy based upon subjectivism (Medhi, Ratan and Toyama, 2009; Morawczynski, 2008, 2009, 2011; Donner and Tellez, 2008). In order to dilute the extreme effects of both paradigms of inquiry, some studies used mixed methods, ranging from surveys, questionnaires to interviews for comparing and triangulating the results (Sivapragasam, Aguero and de Silva, 2011; Plyler, Haas and Nagarajan, 2010).

Finally, we note that the majority of m-banking studies were geographically skewed towards Africa, in particular, Kenya, illustrating the dominant M-PESA model (Jack and Suri, 2011; Mas and Ng'weno, 2010; Morawczynski, 2009, 2011; Karrer-Rueedi and Trueb, 2011; Hayes and Westrup, 2011). There were few studies from Tanzania (Camner and Sjoblom, 2009), Uganda (Ndiwalana and Popov, 2008; Hinman and Matovu, 2010), Ghana (Tobbin, 2012) and South Africa (Anong and Kunovskaya, 2013). There was scant research from Asia (Alampay and Bala, 2010; Sivapragasam, Aguero and de Silva, 2011; Mishra and Bisht, 2013) but most importantly, Pakistan was under represented and justified our case for conducting research in Pakistan.

3. PHILOSOPHICAL PARADIGM FOR THEORETICAL FRAMEWORK

The epistemological stance of the study drew upon the philosophical belief regarding the nature of m-banking and its emerging role in shaping social processes and structures. Within the 'interpretivist' paradigm, truth and knowledge are incapable of being understood independent of social actors. Ontologically, 'social constructionism', acknowledges that reality of the social world is 'constructed' by humans through their engagement with socio-technical processes (Orlikowski and Baroudi, 1991; Walsham, 2006; Burrell and Morgan, 1979). Whilst positivist IS research, through the 'technological imperative model', posited a 'hardware' view of technology, (Carter, 1984), other authors characterised technology as 'social technologies' as displayed in the 'strategic choice model' (Orlikowski, 1992, 2010). Thus, the strategic choice model provided a methodological shift towards more interpretivist approaches in constructing more historical and ethnographical accounts of technological innovation and change (Orlikowski, 2010).

Hence, while different streams of Information Systems (IS) research offered conflicting perceptions on the scope and role of technology, the theoretical framework in the study directed an interpretive and social constructionist view to examine m-banking in Pakistan. Orlikowski's Duality of Technology (1992), advocates a deeper dialectical understanding of the interaction between technology and social agents in organisations. By offering a 'soft determinism', it examines how the social construction of technology has a 'dual effect' on social actors to affect institutional properties. So within this paradigm, by reconceptualising the scope and use of technology (m-banking) and its relationship with social agents (women/designers) and institutions (households), structuration research provided a deep insight to investigate how m-banking affected both designers and users to impact upon socio-economic structures. Thus, the 'Duality of Technology' perceives technology to be socially constructed, enacted and improvised by social actors through various 'technological interpretive' frames highlighting the social interests and disciplinary conflicts (Bijker, 1987; Bijker and Law, 1992). The research questions embedded within this framework steered a qualitative approach for an interpretive analysis of data.

RQ1) How does the design of m-banking enable and constrain programme designers and women beneficiaries?

RQ2) How does m-banking effect the institutional properties of households for financial inclusion in Pakistan?

4. METHODOLOGY- CASE STUDY

Our methodology was an interpretivist case study involving an empirical inquiry investigating a contemporary phenomenon within a real life context (Yin, 2009). We investigated G2P payments, via m-banking, within a social cash transfer programme in Pakistan. Although Stake (2005) argued that case study research was not a methodology, but a choice of what was to be studied, that was, a case within a bounded system, bounded by time and place, however, we conformed to scholars who defined it as a comprehensive strategy of inquiry, or methodology (Merriam, 1998; Denzin and Lincoln, 2011, 2013; Yin, 2009). We designed our case study by distinguishing between the case and context (Yin, 2009). Within the wider context of m-banking, we specifically examined the case of G2P payments within the Benazir Income Support

Programme (BISP).

4.1. Benazir Income Support Programme

The Benazir Income Support Programme (BISP) in Pakistan was launched in 2008 by the former Pakistan People's Party Government to cushion the effects of slow economic growth and mitigate the impacts of rampant inflation of food and fuel prices faced by the poor. Over the years it has successively become the country's main safety net programme, providing unconditional cash transfers PKR 1200 (around \$11.4 per month) to approximately 5.3 million² low-income households that constitute around 18% of the population living below poverty line. Specifically targeted at women to promote women's empowerment, households with a monthly income less than PKR 6000 (\$57) receive the grant across all four provinces in Pakistan; Sindh, Punjab, Baluchistan, Khyber Pakhtoonkhwa, and other regions including Federally Administered Tribal Areas (FATA), Azad Jammu and Kashmir (AJK), Gilgit Baltistan (GB) and Islamabad Capital Territory (BISP, 2014).

BISP, primarily funded by the Government of Pakistan, has already disbursed an amount of 46 billion that is expected to cross RS. 70 billion by the end of the fiscal year 2013-14. However, BISP also receives unprecedented support from multilateral and bilateral donor agencies; World Bank and Department for International Development (DFID) that provided technical and monetary support in designing the poverty card for targeting poor households and shifting cash payments onto digital platforms (BISP, 2014).

4.2. Data Collection Methods and Analysis

The case study methodology influenced the choice of qualitative tools for data collection. Therefore, qualitative methods provided robust means to capture data in the most 'natural' setting, and allowed for interpretations related to personal experiences, body language, behaviour, ethical standards and cultural norms. Moreover, the collection of in-depth, rich data explored relationships and processes that generated an understanding of m-banking 'realities' to 'unfreeze' thinking towards building a framework that evaluated m-banking practices.

In terms of primary data, 33 semi-structured interviews were conducted from March to April 2014. We drew on multiple social actors that were involved in the construction and design of m-banking (BISP officials), transfer of G2P payments (bankers and mobile operators) and women users (BISP beneficiaries). We also used secondary data from BISP reports, official publications and media sources. The geographical location of the study was Rawalpindi and Islamabad in Pakistan - being one of the five regions (Layyah, Larkana, Battagram, Islamabad and Rawalpindi) where m-banking was rolled-out and where the head offices of BISP and mobile operators were located. We interviewed 16 women at the Islamabad Tehsil Office, who were purposively sampled on the basis of possessing mobile phones and registered with BISP since 18 months. The questions explored their usage of mobile phones in accessing G2P payments, and its impact on their socio-economic livelihoods. In addition, 17 semi-structured interviews were held with senior management staff at BISP, m-banking providers (Easypaisa/U-fone) and bankers (United Bank Limited, Alfalah Bank and Summit Bank). This helped us construct multiple 'interpretive' frames in order to triangulate the data sources for enhancing the credibility, trustworthiness and reliability of the qualitative data. On average, interviews lasted between 30-45 minutes with each participant. The interviews were translated from Urdu to English and the transcriptions were uploaded into the software, NVivo, for thematic analysis (Boyatzis, 1998; Taylor and Usher, 2001; Braun and Clark, 2008). Primary and secondary coding identified 'existing' and 'new themes'. Axial coding grouped similar themes together into categories, and finally, relationships were drawn between the categories (Boyatzis, 1998, 2007; Straus and Corbin, 1999).

Although the interview template was theory-led, drawing on concepts from Orlikowski's structuration framework, however, through hybrid analysis, other emergent themes that 'emerged' were also analysed (Boyatzis, 1998; Charmaz, 2009, 2011). Thus, hybrid analysis not only 'discovered' pre-existing themes but extended structuration theory through the introduction of new concepts, such as 'capabilities development' that established the relationship between technology and financial inclusion.

5. FINDINGS AND DISCUSSION

5.1. Enabling and Constraining Women Users and Programme Designers

Socio-economic, human and institutional constraints

Whilst examining how mobile phone usage 'enabled' women, we revealed that women received the full amount of payment, as they no longer had to pay '*bakhsheesh*', or bribes, to the local politician or postmen for delivering the money at home. However, beneficiaries complained of high travel costs when travelling to

² www.bisp.gov.pk/

banking agents for cashing-out their money. Agent network was poor in remote communities that limited access to financial structures. Therefore, many women preferred to travel in groups in order to share the travel costs. *'We have to travel long distances and are not allowed to travel alone so we go in groups....It costs us a lot of time and money and when we come back home at the end of the day, we are still expected to do the housework and cook...it's not fair!'* (BISP beneficiary)

Although women trusted their agents, however, some were fooled by dishonest agents who 'pocketed' their money. As majority of women were illiterate, lack of technical and financial literacy meant that they were still dependant on male family members, agents or friends, to read the text message. Since they were unable to use their mobile phones independently, their handsets were typically hijacked by their husbands as mobile phones also symbolised empowerment. Hence, within structuration theory, we argue that m-banking did not completely 'remove' the human interface, but 'substituted' the local politician or postman with banking agents. Thus, m-banking 'created' new 'intermediaries' or structures of power at the institutional level.

Technological and infrastructural constraints

Technological constraints imposed by m-banking were that handsets were frequently reported to be damaged or lost. Due to high replacement costs, banks or mobile operators were unable to replace the handsets as they were already struggling to cover the initial cost of providing handsets to millions. Frequently, SIM or mobile accounts got blocked owing to the wrong number identified against the computerised national identity card (CNIC). Moreover, we revealed that women did not receive the interactive voice recording (IVR) in their local language, Urdu. Other infrastructural problems concerned poor network coverage, or signal issues resulting in delayed notification of payments. Women, residing in semi-urban or rural remote clusters, complained of frequent power outages that led to handset charging problems. However, we evidenced that the m-banking interface was not 'gender friendly' for women users, stressing the need to design m-banking services that match women capabilities. *'But you have to keep in mind that our beneficiaries are basically women and technology is more male friendly!'* (Director Payments, BISP)

Transparency, efficiency and security of payments

In contrast, the design of m-banking into the programme 'enabled' BISP management to achieve transparency, visibility and efficiency in disbursing G2P payments over secure digital platforms. M-banking provided management access to real-time information on payment status and facilitated the reconciliation of large scale payments that assisted them in efficiently redressing customer complaints. Hence, m-banking reduced massive corruption or 'leakage' by governments as payments were directly transferred into user's mobile accounts, thereby, eliminating human 'intermediaries' - politicians and postmen. However, through the structuration lens, we divulge how m-banking introduced new 'intermediary' structures, banks as they were involved between BISP management and women beneficiaries. *'Primary objective of shifting to m-banking was transparency because there were transparency issues in making payments through Pakistan Post. We were getting news that postmen were involved in corruption, so we implemented technology-based systems, or m-banking, hoping that deserving beneficiaries will get the total amount.'* (Director General Cash Transfers, BISP)

So although financial inclusion has become a general policy goal as governments switch from cash to digital G2P channels in developing countries (Porteous, 2012), however, for BISP it was the secondary agenda. Donors were primarily concerned with transparency in delivering payments to women. Furthermore, we found that it was expensive for banks or mobile operators to fund handsets, so m-banking was not sustainable over the long term. Other security issues; fraudulent payments, terrorist financing and network shutdowns, in times of political turbulence, were political factors that led to the replacement of mobile phones with the Benazir Debit Card. So through the 'Duality of Technology' framework (Orlikowski, 1992), we highlight that the social construction of m-banking primarily served BISP's objectives by 'conditioning' G2P practices around technology. Hence, m-banking design was a function of management's institutional context, but clashed with women user's capabilities and their social context (Pinch and Bijker, 1984, 1987; Bijker and Law, 1992; Mackenzie and Wajcman, 1999).

5.2. Impact of Mobile Banking on Households

According to the poverty score card survey, data from 27 million households identified 7.7 million households that were the 'poorest of the poor' and eligible to receive social cash (BISP, 2014). On the basis of women's socio-economic profile and demographic data obtained from 16 households, we found that 62% of households comprised of nuclear families, with an average family size of 9 members and 5 children per family. 87% of women were dependent upon husband's income, who were self-employed as rickshaw drivers, builders, or fruit and vegetable hawkers, drawing an average monthly household income of PKR 9800 (US\$96). Women participant's average age was 40, and 56% were completely illiterate and un-skilled, 38% had received some level of primary education, while 6% had attended secondary school with a qualification

equivalent to GCSE.

Limited financial inclusion

Research showed that access to G2P payments, via m-banking, improved the quality of life for most women. As the grants supplemented household incomes, it 'cushioned' the effect of poverty and provided financial security to most households. Women disclosed that G2P payments had raised their standard of living and the extra cash was primarily spent on meeting basic household needs; food, clothing and medicines. 90% of beneficiaries withdrew the money within 2-3 days after they received the grant in their mobile accounts. Despite the economic benefits, many women still complained that the amount was unsubstantial to fulfil their requirements and hence, they were unable to save. *'They use the money to buy food, medicines and clothes, and if you actually go into areas of rural Sindh, like Sukkur and Larkana, you will be surprised and shocked to see that some women even don't have sandals on their feet in the scorching sun... you cannot imagine but this is the level of poverty!'* (Director Operations, BISP)

Furthermore, few beneficiaries could afford to send their children to primary school and cover the educational expenses; fees, books, uniforms and stationery. Education was not perceived as an 'emergency' for the poor and was secondary to hunger. In addition, women were unable to invest in 'physical assets', such as agricultural machinery, or livestock, for participating in micro-entrepreneurial activities. Also, women did not have access micro-credit facilities from banks. So although G2P payments improved the economic well-being of households, economic change was only 'marginal'. M-banking failed to restructure households in making themselves sustainable. *'To-date unfortunately there aren't any key successes... we've just kept beneficiaries on a begging bowl! The last management on paper did train fifty seven thousand beneficiaries but there is no record, neither was there a plan of handling them after the training programme, and they've just been left on the streets without jobs!'* (Chairman, BISP)

Whilst the biggest financial reward of m-banking in marginalised communities is 'financial inclusion', however, Porteous' (2007) definition limits financial inclusion in connecting users to bank accounts only. Morawczynski et al. (2010) measures financial inclusion success by focussing on the usage of bank accounts that propel economic activities. *'The most important thing is that we do not have any provision in our agreement with banks that virtual accounts maybe used for any other purpose. Even if some of the beneficiaries do not withdraw their money for a long time, banks don't provide any interest on their money, so this limits financial inclusion!'* (Outreach Manager, BISP)

So, in our case study, G2P payments promoted a 'lower degree' of financial inclusion. Although m-banking successfully connected millions of women to the banking system, however, the provision of bank accounts was not enough for the financial inclusion drive. We revealed that users were provided with 'limited purpose' accounts that were conduit accounts and confined to withdrawals only. As these accounts were not fully 'financially inclusive' bank accounts, they handicapped women in executing a broader spectrum of financial transactions; transferring funds, depositing savings and accessing micro-credit and insurance to instigate local economic activity. *'Initially, m-banking is a way towards financial inclusion, but it is not completely serving the purpose of financial inclusion because beneficiaries have limited purpose bank accounts to receive the payments. In fact, these are rather conduit accounts because they are not allowed to carry out other transactions; they cannot receive or deposit money in that fund or account. So strictly speaking, it is not financial inclusion because we cannot talk about savings!'* (Director Payments, BISP)

Although the m-banking infrastructure permitted a front-end access to banking services, via agents, but the bank-led model was restrictive in terms of cost and proximity to agents in rural areas. Thus, financial inclusion *per se* was still in the 'infancy' stage and had limited impact in transforming the micro-economic landscape for the poor and marginalised communities in Pakistan. Hence, within the structuration model, m-banking diffusion was institutionalised within households to 'alleviate' poverty rather than 'eliminate' poverty.

Through the lens of BISP officials, 'financial inclusion' was reinterpreted as 'social inclusion' of marginalised women. Although majority of women lacked the financial/technical knowledge in handling financial practices independently, however, m-banking successfully nurtured some basic awareness and learning in using mobile phones for receiving G2P payments. *'Financial inclusion is a little far ahead! Beneficiaries are mostly illiterate, so cannot use their mobile phone. But she will make an effort to use technology and since they are determined to get their money, they will eventually learn. They have innovative minds... this is financial inclusion for us! Not that she can independently do financial transactions, but she is developing the financial capabilities or capacity to read numeric data and use the PIN. This is the first stage of financial inclusion. The second stage involves being able to use the banking system independently!'* (Director General Cash Transfers, BISP).

Hence, through Orlikowski's practice lens (2000), women user's constant engagement with technology and financial structures, helped reform financial practices within socio-economic structures. As there was a

steep rise in women's learning curve, financial inclusion was manifested at the basic level only. So in order to enhance individual 'capabilities', we highlight that training and formal financial education needs to be part of the financial inclusion drive. *'We did not have the capacity to provide any training, honestly we did not have the facilities. What we did was that we provided brochures, leaflets to the beneficiaries which had pictorial manifestation of the process, but if you specifically mean training, it wasn't there.'* (Director Payments, BISP)

Social and political inclusion

Furthermore, 'social inclusion' mainly referred to the 'psychological' empowerment of poor women who gained access to a bank or agent that instilled a strong sense of personal pride. Women for the very first time, were issued the computerised national identity card (CNIC) that established their personal and state identity by granting them the right to vote. This led to political inclusion enabling them to access other government services as well. Therefore, within the context of 'social poverty', m-banking led to 'progressive transformation' within socio-political structures (Aygerou, 2010). *'I would say about eighty five to ninety percent of the time we still see women, even in tribal area as well, who actually step out of home, come here and stand in lines at the agent locations and withdraw their own money...so that I think is a significant social change that is happening!'* (Executive Vice President, UBL)

Social inclusion enhanced women beneficiaries' confidence, self-respect, self-esteem and personal freedoms within their households. Many beneficiaries expressed that they spent the money independently that increased their 'choices'. *'For the first time in my life, I saw and ever held a thousand rupee note in my hands... it has raised my self-esteem, so I don't have to ask family for money....I am self-sufficient!'* (BISP beneficiary). Through the structuration lens, we contend that financial practices were sustained through tradition and socialisation that 'legitimised' m-banking through a 'negotiation process' (Orlikowski, 1992). However, what emerged from the analysis was that m-banking failed to build human and financial capacities that enhanced women's agency for financial freedoms.

6. CONCLUSIONS AND CONTRIBUTION TO KNOWLEDGE

To conclude we argue that the paper contributed to the methodological literature on m-banking from developing countries, in particularly, focussing on Pakistan, a country that has been under researched in studies to date. Also, the paper established a relationship between the researchers' philosophical stance of interpretivism and social constructionism reflected within the duality of technology framework to guide the methodology (see figure 1). Hence, the interpretive case study methodology was aligned with the theoretical framework and determined the qualitative methods for the conceptual outcomes. Although the structuration framework guided the data collection process, it was coupled with a hybrid approach for analysis that contributed to new knowledge by highlighting new 'concepts' from the research to 'construct' new theory.

Moreover, theoretically, through the lens of Orlikowski's Duality of Technology, we contributed to the existing literature by arguing that the social construction of m-banking was interweaved within the organisational context for 'enabling' programme designers in achieving transparency, visibility and reconciliation of G2P payments. Financial inclusion was a secondary objective explaining why the design of m-banking constrained women's access to a variety of financial services. So in our case study we revealed that technological and 'human' constraints restricted financial inclusion. This was related to the nature of bank account provided and lack of training and financial education imparted to women users. Thus, G2P payments only helped women 'cope' with poverty rather than 'escape' from poverty, as m-banking was 'palliative' to structurally change or 'transform' households. Hence, the qualitative approach supported the inductive analysis and although the original framework drove the practical inquiry for the research, it discovered other concepts such as 'capabilities development' as a first step to drive the financial inclusion agenda. However, we also revealed that due to economic and political reasons, the m-banking project for G2P payments was not scalable.

We hope that the paper is of interest to the academic community of researchers at the conference. The research attempts to understand how institutional forces, including culture, attitudes and beliefs within households impacts on m-banking innovation. Case study research enabled us to interpret m-banking practices in the most 'natural setting' whilst being sensitive to user's attitudes, beliefs, emotions and ethical practices within the Pakistani society. Hence, the methodological implications from the study are based upon the reliability, transferability and credibility of our research findings that can be successfully extrapolated to similar contexts and interpreted nationally and internationally for other social cash transfer programmes within developing countries.

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