Political Power and Digital Payments in a Government Social Cash Programme

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Abstract

The opportunities provided by digital technologies to governments in distributing digital welfare payments, or government-to-person (G2P) payments to poor citizens has had a profound effect on the inclusion agenda in many developing countries. However, paucity remains on research that investigates the motivations behind the transition from cash to digital G2P payments and its effects on institutional practices. Hence, this paper examined the case of a government social cash programme in Pakistan that implemented digital payments for disbursing G2P payments to poor women beneficiaries. It explored how the interplay of political forces with external and institutional forces influenced the construction of digital payments and its implications on programme managers. Also, how digital payments affected the power equilibrium for certain political actors involved in the programme. Through case study research, qualitative data was collected through interviews conducted with programme designers and stakeholders in the G2P programme. The findings concluded that digital technologies were socially-embedded in the organisational context, so were progressively transformative for programme designers. Hence, digital payments led to the institutional strengthening of the G2P programme, albeit, diminished the power of other political actors. As contribution, the paper sheds light on how the construction of digital payments was a socio-political process that shifted the power equilibrium by creating new structures of power and authority. This paper has implications for governments, banks and international funding agencies who are utilising digital payments to promote the inclusion agenda for its citizens.

Keywords: Digital payments, G2P payments, design, qualitative methods, political power, developing countries, Pakistan

1. Introduction

During the past two decades, many social cash programmes in developing countries are actively engaged in delivering social protection to economically deprived populations. Since the introduction of these programmes in Latin America in the early 1990s, the popularity and support of social cash transfers amongst national governments as well as the international development community has considerably increased. Social cash programmes have therefore moved *'from the margins of development policy towards the mainstream in a number of global regions' (Arnold, Conway and Greenslade, 2011, p. 7).* In this context, the term social cash is described as, *'regular non-contributory payments of money provided by the government or non-governmental organisations to individuals and households' (Samson, 2009, p. 43).*

The opportunities that digital technologies provide to social cash programmes in disbursing social cash to poor citizens has received attention from governments, policy makers and practitioners around the globe (DFID, 2009). With the spur of branchless banking channels, the utilization of digital tools by many governments to disburse government-to-person (G2P) payments, or social cash to millions of its poor people is becoming significant to promote the financial inclusion agenda. Since branchless banking provides a low cost delivery channel for the disbursement of G2P payments, this reinforces government's incentives to exploit the infrastructure and transit to digital payments (Bold, Porteous and Rotman, 2012). Further, the dramatic growth in the number of government social transfer schemes has provided an unprecedented opportunity to use innovative digital payment channels to increase financial access for unbanked recipients whilst decreasing transaction costs, improving security and expanding the recipient base. As electronic payment methods differ with respect to the network of pay points , for instance, automated teller machines (ATM), point-of-sale (PoS) devices, or mobile money agents, recipients access their payments through a variety of technologies-smartcards, magnetic stripe cards, or mobile phones with enhanced security identifiers, including biometric identifiers or Personal Identification Numbers (PIN). Hence, digital payments have 'banked' recipients which can be withdrawn safely and conveniently at a range of pay points (Emmett, 2012).

Research indicates that harnessing the power of technology in making financial services accessible to the poor helps foster financial innovation for sustainable economic growth and development (Oluwatayo, 2014). In relation to this, a growing body of research shows that digital cash transfers may increase the impact of social transfer schemes by providing access to financial services. Whilst G2P payments are known to socially include low income households, the transition to digital payments may combine social and financial inclusion objectives for governments. Hence, governments are making increasing efforts to converge

social inclusion and financial inclusion objectives, within a single policy, for poverty elimination (Zimmerman and Holmes, 2012). According to a World Bank Report (2001),

> Access to financial markets is important for poor people. Like all economic agents, low income households and micro-enterprises can benefit from credit, savings, and insurance services. Such services help to manage risk and to smooth consumption and allow people to take advantage of profitable business opportunities and increase their earnings potential. But financial markets, because of their special features, often serve poor people badly. Since poor people often have insufficient traditional forms of collateral (such as physical assets) to offer, they are often excluded from traditional financial markets. Transactions costs are often high relative to the small loans typically demanded by poor people, and in areas where population density is low, physical access to banking services can be very difficult (World Bank, 2001).

Hence, digital technologies offer the route for governments to increase poor peoples' access to financial markets through the disbursement of electronic G2P payments. Governments, typically, contract with banks or mobile network operators (MNOs) under various business arrangements for transferring social cash directly into beneficiaries' digital bank accounts (Vincent and Cull, 2011). One major reason for the private sector involvement is that without their expertise and technological infrastructure, it is difficult for governments to transfer digital G2P payments independently (Oberlander and Brossmann, 2014). As governments do not provide contracted agents with POS devices or ATMs, their partnerships with the financial or mobile industry establishes a network of banking agents, or pay points for recipients to cash-out their digital payments. Moreover, the reduction in transaction and administrative costs with reduced security risks provides incentives for governments to embrace digital channels for enhancing outreach of payments in remote populations. Further, digital payments are known to considerably reduce corruption and fraud- which otherwise presents a heavy strain on programme budgets, in addition to increasing operational efficiencies for the disbursement of social cash via digital platforms (Almazan, 2013; Oberlander and Brossmann, 2014).

Studies from middle income countries displayed that digital payments offered savings for governments that also extended the outreach of G2P payments to a larger population of beneficiaries (Bold, Porteous and Rotman, 2012). For instance, Brazil reduced the transaction costs of its *Bolsa Família* programme from 14.7 percent to 2.6 percent of the grant value (Lindert, et al., 2007). In South Africa, there was evidence suggesting that the variable costs for G2P programmes more than halved after implementation of electronic delivery payment channels (Pickens, Porteous and Rotman, 2009). Furthermore, it was estimated that by diminishing corruption, the Government of India could save up to USD $18.3 billion (28 percent of the total costs) per year, provided if all welfare schemes, including the *National Rural Employment Guarantee Scheme* (NREGS) disbursed digital workfare payments to recipients (Ehrbeck, et al., 2010).

Other studies briefly outlined how Banco Davivienda in Columbia delivered G2P using *Daviplata* mobile money, but there was little evidence on how these payments linked beneficiaries to financially inclusive services. Similarly, in Malawi, Airtel distributed digital payments to 23,000 families through *Airtel Money* for Save the Children and the World Food

Programme, but owing to the small scale of the project, the impact it had on financial inclusion was rather unpronounced (Almazan, 2013). Another programme that used m-banking for disbursing G2P payments was the *Disarmament, Demobilisation and Reintegration* (DDR) programme in the Democratic Republic of Congo- paying monthly demobilization allowances of USD $25 to retired soldiers, residing in villages that were well beyond the reach of the country's restrictive financial system (Bankable Frontier Associates, 2009).

Whilst policy agendas have emphasised the deployment of digital technologies to connect poor households to the financial sector, so far, there is little research that explores the innovation of digital payments, particularly, in the context of public social cash programmes. Whilst extant research on ICT innovation affords a techno-economic lens that focusses on business models from programme managers or mobile operator's perspectives, paucity remains on exploring the construction of digital payments through a socio-political lens in government cash programmes.

Hence, the objectives of this paper is to critically examine how the interplay of external and institutional forces influenced the social construction from cash to digital payments in the specific case of the Benazir Income Support Programme (BISP) in Pakistan. My main research question is*,' how were digital payments socially constructed under the influence of external and internal institutional forces that affected the power dynamics in the BISP programme?'* In order to answer this question, my research design utilised qualitative methods, such as interviews for collecting primary data and the data was thematically analysed based on the interpretations of various stakeholders involved in the construction of digital G2P payments.

The paper is organised as follows. In section 2, I will first critically review the theoretical literature based on Avgerou's (2008) study that analyses digital innovation projects in developing countries, and hence, frames the theoretical framework in this study. Section 3 introduces the specific context of digital payments based on the branchless banking sector in Pakistan. Section 4 introduces the case study for this research and informs how qualitative data was collected from key stakeholders in the BISP programme, and how it was analysed. In section 5, the findings are presented, following which in the final section 6, I will discuss the findings and conclude the study by shedding light on the contributions the paper makes in the ICT for development domain.

2. ICT Innovation in Developing Countries

The study draws on the Information Communications for Development (ICT4D) literature that is situated in the domain of Information Systems for Developing Countries (ISDC). Invariably, economic and social theory converge on the relationship between ICT and socio-economic change to suggest that efforts to spread information and communication technologies are necessary to participate in the emerging global economy, but not adequate to create economic growth (Avgerou, 1998; 2003). However, attributing change to technologies, new technologies, or mediating devices, are generative in creating new and direct forms of communication, economic activity, information retrieval, and perhaps, even new forms of

international development (Tapscott and Williams, 2006; Heeks, 2008; 2009; 2010; Thompson, 2008). Therefore, the diffusion of ICT related activities is perceived to be linked to structural changes in the world economy and interventions in organisations that puts pressure on policy makers and governments to re-design their emerging socio-economic structures and organisational innovations related to ICT innovation (Avgerou, 1998; 2000; Madon, Krishna and Michael, 2010).

2.1 ICT Transfer and Diffusion

In the literature, ICT innovation may be categorised as *technological-deterministic-* that is mainly universalistic with narrowly situated perspectives on innovation (Avgerou and Madon, 2004). This implies that technological innovation is guided by planned methodical actions that steers organisational performance with emphasis on the design and role of technology solutions within business models. Hence, techno-economic reasoning and logic over-rides the rationality that technological innovations need to fit within social constructs (Avgerou, 2001; 2008; 2010). This discourse being universalistic separates technological innovation from its immediate context, and often acknowledges contextual contingencies (Avgerou and Madon, 2004). As there is a clash between the techno-economic rationality for development and the local system of reasoning, failure to cultivate behaviours in support of technological innovation provides little hope for sustained development in local communities (Ciborra, 2005; Avgerou and McGrath, 2007; Kyem, 2012).

Avgerou (2008) identified three discourses that combined the nature of ICT innovation processes with the relevant conceptual constructs of these processes. First, at the institutional level, ICT innovation in developing countries is perceived as a process of *ICT transfer and diffusion* of organisational practices from advanced economies to developing nations (Sahay and Avgerou, 2002; Avgerou, 2008). Combining and adapting technology within local structures leads to *progressive transformation* (Avgerou, 2010) that is rooted in the assumption that ICT innovation in developing countries is mainly concerned with 'catching up' with the technological advanced rich economies to achieve prosperity, improvements in health, education, and political participation in the same way as developed countries (Okpaku, 2006; Avgerou, 2008; 2010). In this context, some international development agencies, including the World Bank, the United Nations Development Program (UNDP), World Economic Forum (WEF) and International Monetary Fund (IMF) have aggressively pushed the notion of ICTs to the forefront of their developmental agendas. In doing so, they have linked ICT with economic prosperity and poverty reduction in developing countries (United Nations Human Development Report, 2001; Hamel, 2010).

However, other scholars have subscribed to a more critical stance against the 'fad of ICTs for development' and are rather sceptical of the motivations behind the thrust towards digitalization in developing countries (Wade, 2002). ICT transfer and diffusion from developed to developing countries is perceived with suspicion that the available ICT artefacts and business models may not necessarily meet the developing country's needs (Sahay and Avgerou, 2002;

Thompson, 2008; Avgerou, 2010). This is because agendas dictated by international policy makers and donor organisations may interfere with local developmental agendas (Thompson, 2008) and may cause *disruptive transformation.* Since, technologies are designed and developed elsewhere, developing countries may become vulnerable to the increasing complexities arising from the inclusion of digital projects (Avgerou, 2010). Wade (2002), for instance, argues that foreign countries exploit their monopolistic powers to reinforce their intellectual dominance and authority in the developmental field. Similarly, other scholars also conform to the techno-functionalist thinking of developed nations that conceals a powerful intellectual imperialism (Avgerou, Ciborra and Land, 2004; Wade 2004; Ciborra, 2005). Hence, scholars have expressed their concerns related to the challenges faced in following the trends and standards of ICT-enabled globalisation resulting from ICT innovation in developing countries (Wade, 2002; Avgerou, 1998; 2010).

Whilst the technological deterministic perspective advocates techno-centric universal solutions through the use of appropriate standards and protocols that rationalises the interplay between local and global domains (Sahay and Avgerou, 2002; Avgerou and Madon, 2004), it confers a policy driven rationale for institutionalising digital technologies for practitioners, governments, donor organisations and regulatory institutions. Critics, therefore, argue that the current emphasis on digital innovation in the financial sector inherently dismisses the specific socio-cultural context of technology in which it was created and used (Qureshi, 2014; Duncombe and Boateng, 2009).

2.2 Socially-Embedded ICTs

The socio-technical approach draws on contextual studies (Pettigrew, 1985) in favour of user-driven approaches for technological innovation (Mumford and Weir, 1979; Mumford, 2000; Avgerou and Madon, 2004). While Pettigrew's contextual approach continues to be followed in ISDC studies, other theoretical approaches, including social constructionist and situated approaches have been introduced to study ICT innovation in developing countries' contexts (Avgerou, 2001). This pertains to the second discourse presented by Avgerou (2008) that underscores the significance of the indigenous context and social shaping of new ICT's in innovation projects in developing countries (Avgerou and Walsham, 2000; Avgerou, 2001; 2008). Within this perspective, ICT innovation is perceived as a situated, or *socially-embedded* process- enacted by social actors who make meaning of their immediate context (Avgerou, 2002). Hence, digital innovation arises from the social, organisational, cultural and political contexts that shape its form and design (Avgerou, 2008; 2010). Technology innovation is a *socially constructed* course of action undertaken by local actors that steers organisational change. While its purpose arises from local problems, its course is determined by the way local actors make sense of it, and incorporate the context of its use in the design that leads to *progressive transformation* (Avgerou, 2002; 2010; Sahay and Avgerou, 2002). Hence, local innovation steers new socio-technical arrangements in developing countries for the *progressive transformation* of communities (Avgerou, 2002; 2008; 2010; Braa, et al., 2007). This assumption explains how the innovation of indigenous ICT projects in organisations or rural

communities may enact new structures for organisational change, as ICT innovation focusses on users' needs whilst designing digital inclusion projects in communities (Cecchini and Scott, 2003; Walsham and Sahay, 2006; Casal, 2007). Although technological innovations evolve to gradually fit with organisational needs, they are most successful when they are integrated within local structures and indigenous channels (Avgerou, 2000; 2010; Casal, 2007; Madon, et al., 2009).

Despite the promising outcomes, the socio-technical perspective may sometimes also result in *disruptive transformation* arising from political discourses within social actors (Avgerou, 2010). This is because the inclusion of digital projects, owing to their political nature, may sometimes create inequalities that may emerge within cultures and societies, so perhaps may require greater government support in focussing on the local context in developing countries (Madon, et al., 2009; Madon, Krishna and Michael, 2010). However, whilst the *ICT transfer and diffusion* process may represent the macro-level, *socially-embedded ICTs* may narrowly focus on the local level, so hence, it is important to strike a middle ground between the universalistic and situated theories that dominate ICT4D studies (Avgerou, Ciborra and Land, 2004).

3. Digital Payment Innovation in Pakistan

Pakistan is a developing country with a population exceeding 190 million (Pakistan Economic Survey, 2015). However, the penetration of formal financial services remains low, by any measure, as approximately 88 percent of the population is unbanked with roughly 23 million bank accounts, 11,600 bank branches and 6,232 ATMs across the country for the entire population (Anwar, 2013). This problem is particularly severe in rural areas, where there are fewer than 2,500 bank branches (CGAP, 2011) for 61 percent of the rural population in Pakistan (Pakistan Economic Survey, 2015). As the problem of financial access remains low for the majority of the population, this exacerbates the financial divide between the poor and rich in the country.

Against this backdrop, a dynamic telecommunications sector and permissive regulator has laid the foundations for an emerging branchless banking sector (CGAP, 2011). In June 2007, the Banking Policy and Regulations Department of the State Bank of Pakistan (SBP) released its Policy Paper on the Regulatory Framework for 'Mobile Banking in Pakistan'. The Policy Paper stated that branchless banking offers a distinct alternative to conventional branch-based banking, in the sense that the customer conducts financial transactions at a whole range of retail agents instead of at bank branches. The Branchless Banking Regulations[1] were implemented

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[1] According to the Banking Policy Regulations (2011), 'branchless banking' is defined to exclude information services, provided by banks to their existing customers via channels, including mobile phones, internet and SMS channels. This is because branchless banking targets the unbanked to promote financial inclusion, rather than encouraging models that are additive- providing services to existing customers.

in 2008 as articulated in the Policy Paper (CGAP, 2011). The State Bank of Pakistan has therefore achieved international recognition for its enabling approach that has created a climate of certainty through the promulgation of branchless banking guidelines in the country (CGAP, 2012).

The fundamental requirements that support the growth of branchless banking are management capabilities for handling large operations, managing agent's network and distribution channels, and the utilisation of technology. While the State Bank of Pakistan promotes the branchless infrastructure, it encourages the use of successful global practices within a regulatory and supervisory mechanism that enables governments, financial institutions, including microfinance banks (MFBs) to develop viable business models. Branchless banking regulation[2] has thus taken a permissive and constructive regulatory approach by providing clear guidance for businesses to adjust regulations where necessary. As articulated in a CGAP (2012) report,

> Presently, the country is witnessing the beginning of a new retail banking revolution, whereby, a large segment of the population, previously unbanked, has started entering into a new realm of financial services (Branchless Banking Newsletter, 2011, cited in CGAP, 2012).

The Strategic Framework under the Financial Inclusion Programme launched in 2011, and supported by UK's Department for International Development (DFID) advocates inclusive financial services for underserved populations in Pakistan. Hence, there is cumulative demand and pressure on the economic sector to develop the necessary infrastructure to foster inclusive financial growth in the country. The strategy focusses on a variety of measures to accelerate the outreach of financial services- promoting alternative delivery channels, mobilising deposit, up-scaling for micro-enterprise development, improving governance, building institutional capacity and regulating mechanisms for microfinance providers (Kazmi, 2012). The Governor of the State Bank of Pakistan has remarked,

> Branchless banking and microfinance initiatives in Pakistan are among the hidden forces of resilience offering the best hope for the country's future- being in perpetual motion at the grassroots with ceaseless creativity, so people find affordable solutions to their basic needs (Anwar, 2013).

Furthermore, substantial growth in the branchless banking industry has motivated G2P programmes in Pakistan to exploit digital channels for delivering G2P payments. Here, the role of technology is pivotal in promoting alternative digital channels in enabling the government sector to disburse G2P payments via mobile technologies, point-of-sale (POS) devices, automatic teller machines (ATMs) or smart/debit cards (CGAP, 2011). There is consensus between the government, policy makers and financial regulators to improve financial access for the unbanked poor through the use of innovative and inclusive delivery channels (Anwar, 2013). According to Rotman, Kumar and Parada (2013),

Pakistan serves as an example of how public and private institutions together can move a country towards a digital financially inclusive system. Government and public actors have created the enabling environment and have provided seed funding, while private actors are developing the infrastructure, services and a long-term business case (Rotman, Kumar and Parada, 2013).

Hence, branchless banking initiatives have enabled government cash programmes in Pakistan to digitise a large share of G2P payments to its poor citizens. Whilst social cash transfers constitute around 11 percent of government payments, salaries make up 68 percent and pensions comprise of 21 percent of the total G2P flows (Rotman, Kumar and Parada, 2013). As digital payments have the potential to extend the outreach of G2P payments in remote populations, the government actively encourages the branchless banking industry to move the country towards a digital financially inclusive system.

4. Case Study and Data Collection

The interpretive case study (Walsham, 2006; Yin, 2009) of the Benazir Income Support Programme (BISP) investigates how power and politics were affected by the implementation of digital payments in the programme. Initially, various digital tools, including smart cards and mobile phone banking were deployed in selected pilot districts for receiving digital payments, eventually, the Benazir Debit Card was phased in nationally. The case study is instrumental and provides rich insights on the interpretations gathered from a variety of stakeholders who participated in the digital innovation phase of the BISP programme.

4.1 Benazir Income Support Programme

The Benazir Income Support Programme (BISP) was launched in 2008 by the former Pakistan People's Party Government, and remains the first ever comprehensive, universal and transparent social safety programme in the country. It is the flagship programme of the Pakistani Government to achieve the targets set by the United Nation's Millennium Development Goals (MDGs) for reducing chronic malnutrition in impoverished communities. The concept of BISP is derived from the widely acclaimed developmental theories of social protection that are ubiquitously implemented in both the developing and developed world (BISP, 2014).

The Programme was established through an Act of Parliament, and is implemented through an organisation working under the executive patronage of the Prime Minister, while the President of Pakistan is the Chief Patron of the programme. BISP has nationwide presence with the Head Office located in the Federal Capital- Islamabad, and 6 regional offices at the Provincial Capitals, including Azad Jammu Kashmir (AJK) and Gilgit Baltistan (GB). There are 31 divisional offices comprising of 2000 staff working in the regional branches across the country. The organisation is headed by a Board, with a nominated Chairperson, and an Executive

Committee- comprising of a Secretary and Cabinet Members hailing from the finance, economic and foreign affair ministries, in addition to other Non-Government Members (BISP, 2014).

The primary objective of the programme is to cushion the effects of chronic poverty and mitigate the impacts of rampant inflation of food and fuel prices on poor households in Pakistan. Over the years, it has successively become the country's primary safety net programme and provides monthly social cash transfers of USD[3] $14.3 per month (Pakistani Rupees- PKR 1500) to around 5.3 million[4] low-income households (BISP, 2014). However, the payments are disbursed to women only on a quarterly basis and amount to USD $43 (PKR 4500) per quarter. BISP supplements households incomes that fall below USD $57 (PKR 6000) monthly. As the programme targets women only as household heads, BISP aims to empower women. This is because women beneficiaries, living in abject poverty, belong to the most under-privileged and vulnerable sections of society. Furthermore, economic deprivation, regardless of political affinity, racial identity, geographical location and religious beliefs are other criteria that qualify beneficiaries to register with BISP. The programme covers households from all provinces of the country- Sindh, Punjab, Balochistan and Khyber Pakhtoonkhwa and other regions- Federally Administered Tribal Areas (FATA), Azad Jammu and Kashmir (AJK), Gilgit Baltistan (GB) and Islamabad Capital Territory (BISP, 2014).

BISP holds the largest database of the poorest families in Pakistan after execution of the largest and first ever door-to-door poverty survey undertaken in collaboration with the National Database and Registration Authority (NADRA). The poverty score-card survey, introduced in October 2010, was the first of its kind in South Asia and assisted BISP to objectively identify 7.7 million households which were the 'poorest of the poor'. The poverty score-card was designed with financial and technical assistance from the World Bank and Department for International Development (DFID), UK. Based on a proxy means test (PMT) it determined the welfare status of households- related to household size, asset ownership and education of household members. Hence, the data was assessed for the planning of pro-poor development policies and practices and has been registered by NADRA, and shared through protocols with other international and national organizations for research purposes.

The programme is primarily funded by the Government of Pakistan and disbursed an amount that was expected to cross PKR. 70 billion (USD $667,908,500) by the end of FY 2013-15. It also receives unprecedented support from multilateral and bilateral donor agencies, such as, World Bank and DFID UK (BISP, 2014).

4.2 Data Collection and Analysis

Primary data was collected in March and April 2014 in Pakistan. I used qualitative methods for data collection (Walsham, 1995; 2006), based on which total 17 semi-structured interviews

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[3] Based on the exchange rate in February 2016: 1USD = 104.91 PKR
[4] Number of BISP beneficiaries as on March 2014 recorded in the Brief on BISP- A Social Safety Net: Government of Pakistan

were conducted with BISP officials, bankers, mobile operator staff and international agency donors. I also drew on secondary data contained in organisational reports, official documents and formal and informal media sources. The interviews were held in Islamabad with the BISP head office staff, mobile operator staff (Easypaisa and U-fone), bankers (United Bank Limited, Alfalah Bank and Summit Bank) and donor officials (DFID). The participants were purposively sampled based on their job descriptions, and as experts in their job roles, they were able to provide the specific information that was relevant to answer the interview questions in the study. Prior, to conducting the interviews, the participants were provided with a participant information sheet that outlined the purpose of the study, the nature of information sought, data privacy and ethical guidelines to be followed. The interview schedule was modified for every stakeholder according to the nature of information that was required which fed in to the primary research question. All interviews were conducted in English and lasted between 45-60 minutes on average. The majority were audio-recorded, transcribed and were uploaded into the software NVivo for thematic analysis (Boyatiz, 1998; 2007; Taylor and Ussher, 2001; Braun and Clark, 2006). The interview data was coded at the nodes under various themes, and repeated themes that emerged from various data sources were compared and grouped under the same theme. Similar themes were then clustered into categories that represented a higher level of abstraction. The themes were then analysed and interpreted as findings through the perspectives captured by the participants, as presented in the next section.

5. Findings and Discussion

The following themes emerged from the data collected from interviews which were mapped in relation to answer the research question in the study.

5.1 The Transition from Cash to Digital Payments

Initially, when the programme was launched in 2008 in the absence of a banking infrastructure, social cash was distributed to women beneficiaries by local parliamentarians in cash, or through money orders by postmen. The Director of Payments at BISP elaborated,

> One of the reason for the initial Pakistan Post payments were that out of approximately six thousand, seven hundred union councils, more than seven hundred union councils did not have any bank branch or bank. Later, we turned towards branchless banking because that was the only available option that would have large outreach in the country to conveniently serve the beneficiaries (Director of Payments, BISP).

The Director Payments further clarified why cash payments were introduced at the beginning- for knitting into the socio-cultural tradition of women observing *'purdah'* (veil) who were confined to their homes.

> Another reason for having cash payments initially was that because the beneficiary was a woman, there was sensitivity in certain areas of the country where women were not allowed to step outside their homes to get their money. So in the beginning, we thought that it would be better to start with Pakistan Post. And then, at a later stage, when we know that beneficiaries' families have now understood the importance of BISP, they would allow women to have their own bank accounts and go out to withdraw their money- one of the main objectives of the programme was to empower women (Director of Payments, BISP).

However, in 2010, after the new initiative of the poverty score-card that objectively targeted beneficiaries, digital G2P payments were collected by women through digital tools, such as smart cards, mobile phones or debit cards. As figures indicated, approximately 94% of beneficiaries received payments through digital tools (BISP, 2014). Moreover, digital innovation platforms extended the outreach of payments to a wider audience of poor beneficiaries.

5.2 External Forces

The table below highlights the external forces that influenced the social construction of digital payments in the BISP programme. The forces represent diverse viewpoints that affected the power dynamics between various social actors involved in the social construction of technology.

Political Forces	Regulatory Forces	Economic Forces	International Forces
Government pressure	Branchless banking regulation	Profitable business case	International donor support and funding
Diminishing political power	Bank-led model	Commission and float	Institutional strengthening
Political and security risks		Limited purpose accounts	

Themes Illustrating the Effects of External Forces on the Social Construction of Mobile Banking

Source: Interviews

5.2.1 Political Forces

Although certain politicians in the Pakistani Government resisted the switch to digital G2P payments, there was immense political pressure from the President which coerced BISP management to make the political decision. Since the programme was politically significant and centrepiece of the Government's strategy to achieve the MDGs targets for poverty alleviation, BISP was associated with a political tag, so was criticised by the civil society for achieving political gains. Nonetheless, other political actors welcomed the decision as digital payment channels were secure, especially in politically turbulent areas where security staff were deployed to provide security during the delivery of payments to beneficiaries. Hence, digital payments reduced transaction and payment processing costs for BISP. The Executive Vice President of a bank remarked,

> I think we were lucky enough- the Finance Minister was against the idea but Chairman NADRA was very supportive of us, so he went to the President and Prime Minister and came back with the approval of shifting to digital payments. So I think that all those factors combined together, and security, put the pressure on the Government and BISP (Executive Vice President, UBL).

Moreover, the banking sector recognised a potential business case in disbursing electronic G2P payments, so successfully convinced the Government to digitise G2P payments, as noted by a banker,

> So I was invited to a meeting with the President and he also started telling BISP folks that you need to move quickly on the digital payment side. The Government of Pakistan was not willing to fund mobile phones, neither any donor agency was willing to fund handsets because it was a political issue at that point in time. So we went ahead and we gave about sixty thousand mobile phones in one district free of cost to people at our expense, and ran that project of mobile phone based payments (Executive Vice President, UBL).

As presented earlier, the targeting of poor households for distributing G2P payments was initially entrusted to local parliamentarians. However, with the introduction of digital payments, households were objectively targeted through the poverty score-card survey that automatically eliminated many undeserved families from the beneficiary records held by NADRA. Survey enumerators visited each household, although it was learnt that they sometimes selected a central location in the village or community where community members could come and have their eligibility forms filled out. While this process may have excluded certain households who may have had differences with local politicians, or power brokers, the majority of beneficiaries flocked in the communal spaces to get their poverty score-card forms filled by enumerators who had no particular affiliation with a specific political party. So since the prescribed method for the survey was a door-to-door census, the poverty score-card by-passed the conventional intervention of local patrons, or politicians for identifying eligible

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beneficiaries. Although local intermediaries were not completely absent from the process, they usually remained peripheral due to the strong message for attaining universal enumeration in the survey process and training.

Previously, as politicians distributed cash to favoured or 'handpicked' households, objective targeting for delivering digital payments had considerably shrunk their power base. This measure adversely impacted on their vote bank in future elections, so many local politicians resisted to the change as it stripped their political powers and diminished their control, popularity and authority in their regional constituencies. The poverty score-card was neutral to specific qualitative dimensions of marginality and exclusion, such as local power relations, status, kinship, provincial identity and religious minority which had registered genuine beneficiaries into the state welfare system. Hence, this was a rare instance of a social intervention that impartially reached out to all deserved households across the country. The Director General of Cash Transfers stated,

> Credit goes to the political government who agreed to shift to m-banking. It was not an easy political decision because around 2.24 million beneficiaries were getting money from politicians. So it was a difficult time for any political government to remove beneficiaries from the list, who were identified by parliamentarians, as moving from community-based targeting to poverty score-card targeting was a potential threat for local politicians (Director General of Cash Transfers, BISP).

So while there was tremendous support from government officials at the federal level, local politicians resisted the shift to electronic G2P channels, as digital payments enacted new structures and processes that affected the power equilibrium in the G2P system.

5.2.2 Regulatory and Economic Forces

Digital payment innovation within BISP was driven by regulatory and economic forces within the branchless banking framework enacted by the State Bank of Pakistan (SBP). Branchless banking regulations, issued in 2008, provided an enabling environment for banks to increase their financial outreach through banking agents, ATMs or POS machines that served as cash-out points for beneficiaries. Moreover, branchless banking regulation supported the bank-led model for banks to collaborate with mobile operators and extend mobile payments to those beneficiaries, living in rural or underserved regions, where setting up bank branches or agent channels would have otherwise been costly. Although regulators' efforts were commended in supporting the branchless banking infrastructure, they were criticised by certain mobile operators for playing a passive role in the G2P sector in Pakistan. As exclaimed by a mobile operator Director,

> Pakistan Telecommunication Authority and the State Bank have been recognised and celebrated as very good regulators- in terms of their vision of how to go about things and the balance that they've maintained between banks and telecoms in this entire effort. On the G2P side, there's nothing that regulators have done as much as we want- G2P payments was a

> Government initiative and not a State Bank initiative. We've been pushing both regulators for a long time to digitise all G2P payments in this country, and the benefits are going to be huge, but I'm surprised that nobody has the vision to do anything in that area. So have the regulators been beneficial for G2P? Not really, they've just sat back! (Director, Easypaisa)

Nevertheless, the creation of the agent infrastructure by banks for BISP disbursements was cost-effective in the long-term, despite the high initial set up costs for banks owing to the provision of digital instruments (mobile phones, smart cards or debit cards) to beneficiaries. This was justified by a senior bank manager,

> The setting up of branchless banking channels through agent networks to serve the unbanked segment is a viable solution for economic entities, as the cost of setting up a branchless banking channel is at least 75% lower than setting up a bank branch (Assistant Manager, Summit Bank).

Although banks provided accounts with limited functionality that were essentially conduit accounts for withdrawing G2P payments only, the implications on financial inclusion were restrictive for users. This is because the accounts failed to provide women user's access to a fuller spectrum of financial services, such as money transfers, credit and saving facilities. While this limitation hindered revenue streams for banks, the provision of low value individual accounts to millions of users made the business case profitable for banks, as economies of scale were achieved through the sheer volume of transactions. Additionally, regular government fees and float[5] earned by banks made digital payments attractive for banks to remain in business, despite the high costs of acquiring and managing new agent channels. A BISP official disclosed,

> As per agreement, banks are required to credit the money into the beneficiaries' accounts within five days. Once the beneficiaries' accounts get credited, not all of them withdraw their money at once, and since their account is a non-salary account, by default they earn float. Also, we are paying 3% of the dispersed amount as service charges to banks, so they have a strong business case with us (Director of Payments, BISP).

Another narrative was presented by a mobile operator director, who criticised the role of banks in providing a limited range of financial services to users, but applauded how mobile operators were proactively serving G2P beneficiaries across the country in the m-banking pilots.

> Banks cannot serve large G2P populations…let me tell you….how will they do it? There are no branches that banks can put up- it's only branchless banking players that are suited for this. So banks, solely, can't serve beneficiaries, unless they collaborate with the mobile operator industry (Director, Easypaisa).

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[5] In economics, float is defined as duplicate money present in the banking system during the time that elapses between when a check is deposited into a bank account and when the funds are available to the recipient, during which period the bank is collecting payment from the sender's bank. It can also be used as an investable asset, but makes up the smallest part of the money supply- adopted from the financial dictionary.

Hence, digital innovation in the G2P sector was perceived as a socio-economic process leading to change that involved negotiation and collaboration with BISP actors.

5.1.3 International Forces

International donor agencies played a significant role in the transition to digital payments in the programme. BISP management faced mounting pressure from the international donor community to digitise G2P outflows with the aim to attain transparency in the payment process. Hence, international donors provided technical and financial assistance in the targeting and delivery of digital G2P payments to poor women beneficiaries. So for BISP and donors alike, financial inclusion appeared to be the secondary agenda in the transition to m-banking. A BISP official verified,

> International donors got involved in the targeting of beneficiaries and they provided technical and financial assistance for the m-banking payment mechanism as well. Donor assistance was always there and they insisted on moving to systems that were transparent and financially inclusive- the World Bank, DFID, Agricultural Development Bank and USAID- are all donors working closely with us (Director General of Cash Transfers, BISP).

Moreover, international donors supported the institutional strengthening of BISP through transparent delivery mechanisms. Hence, both at the policy and practice levels, donors pressed for greater accountability in the G2P payment system. Thus, it was evident that foreign forces played an instrumental role in instituting transparency mechanisms within the disbursement of social cash. As further highlighted by a DFID official,

> For DFID, it is important that there is transparency in the delivery of social cash, but also that there is institutional strengthening in systems in BISP so that there is also good accountability. We have invested three hundred million pounds until 2020, but it is important that there is a move towards electronic payments, including m-banking which BISP itself is committed to (DFID Director).

5.3 Institutional Forces

Analysing the themes coded from interviews with BISP officials, working at the strategic, managerial and operational levels, unveiled the institutional forces that affected the shift to digital payments that affected structures and processes within BISP. The table illustrates the themes mapped from the interview guide to present the findings in relation to the research question.

BISP Management	Social Effects	Technological Effects
Institutional Forces	Replacing human intermediaries with technology	Transparency Visibility Live reconciliation Complaint redress Efficiency and Security

Effects of Institutional Forces on BISP Management

Source: Interviews

5.3.1 Transparency and Visibility

Prior to digital innovation in the BISP programme, there were grave concerns that cash payments did not reach deserving households. Some parliamentarians and postmen pocketed the money, or demanded *baksheesh* (bribes) from women to ensure the delivery of future payments at home. Thus previously, there was a disconnection between BISP managers at the head office with the middlemen in the field who disbursed payments to women. In this respect, digital payments enabled BISP managers to tackle one of the most perceptible challenges-achieving transparency within structures and processes in the disbursement chain. Technology streamlined the G2P channels to ensure that beneficiaries received the promised amount of grant. Thus, digital technologies can be perceived as part of the disciplinary mechanism for BISP that attempted to improve accountability in G2P delivery. This analysis can be understood from the governance objective, as proclaimed by the Director General of Cash Transfers at BISP,

> The primary objective of digital payments was to ensure transparency because there were transparency issues involved in making payments through the Pakistan Post. We were getting news that the postmen were involved in corruption, so we implemented technology-based systems, or m-banking, in hoping that the deserving beneficiaries would get the total amount from us (Director General of Cash Transfers, BISP).

These findings were consistent with studies that portrayed how digital payments were introduced to reduce the risks of bribes at the end of the delivery chain and reduced delivery costs for governments (Pickens, Porteous and Rotman, 2009). Cashing out at pay points provided greater choice to beneficiaries in withdrawing their payments, and further mitigated the risks of fraud or corruption with enhanced security (Emmett, 2012; Gelb and Decker, 2012).

Other studies also mirrored that digital G2P payments were less prone to fraud because electronic transfers created an auditable trail from the government to the final recipient (Bold, Porteous and Rotman, 2009). Since the transfer of digital G2P payments involved banks, payments were regulated under stringent banking conditions that increased pressure on programme managers. As regulators frequently demanded an accurate documentation of disbursements, it was difficult for political actors to illegally divert large sums of money from the payment channels (Devereux and Vincent, 2010). Another senior BISP official echoed that m-banking initiatives were measures undertaken to enhance the visibility in making payments by political actors,

> Mobile banking was adopted for the real-time visibility of payments, so beneficiaries were instantly informed when the money was transferred into their accounts. Pakistan Post had problems with visibility, as after 3 months, we got to know about the money status. So the digitised tool informed us about the status of payments immediately (Outreach Manager, BISP).

Other studies in the literature also mirrored these findings in illustrating that digital payments enhanced accountability in procedures. Studies from Argentina evidenced that digital payments marked a significant decline in bribes at pay points, resulting in an additional value of USD $10.7 million of payments reaching the hands of final beneficiaries (Pickens, Porteous and Rotman, 2009). Further, research from Bangladesh also highlighted the advantages of digital innovation in the G2P sector, which was primarily driven by the institutional goals to decrease transaction costs by reducing corruption in the social cash programme (Rotman, 2014).

Whilst visibility for discipline lied at the core of technology-enabled platforms that improved communication and service delivery for BISP officials, the complexity of this disciplinary mechanism arising from digital payments, engendered greater dialogue between the state, foreign and local beneficiary actors. However, this change can be perceived through the power lens as there some conflict of interests visible in few BISP officials. Whilst it was evidenced how digital payments facilitated BISP officials in the routinisation and standardisation of the grant disbursement process, it was also at odds with BISP staff who lost their autonomy with the introduction of technology. This was further explicated by a BISP Manager who expressed his personal resentment and bias towards the shift from cash to digital payment platforms for disbursing social cash.

> But there is a handicap with m-banking that we are dependent upon the information provided to us by banks, so we are bound and feel rather restricted- everyone does not have real-time information, so we get the picture that is dictated to us by banks! (Outreach Manager, BISP)

This narrative suggested that digital innovation within the programme, apparently, disturbed the power equilibrium between BISP officials and bankers. Since technology transferred more control and authority to bankers, some BISP mangers felt powerless, as they were solely dependent upon banks for providing information on payment status. However, this questioning

may just seem to be an excuse where state officials do not wish to account to stakeholders, beneficiaries, or other foreign interest groups involved in the programme. Hence, the discourse that technology produced and reproduced structures of power within organisations that favoured and/or disfavoured certain socio-political actors over others in the m-banking ecosystem becomes prominent in the study.

5.3.2 Live Reconciliation and Complaint Redress

The findings further evinced that digital payments enabled BISP management in the live reconciliation of payments. In essence, it created formal reporting tools in assisting managers to receive accurate data on beneficiaries' payment statuses in the most efficient manner. Hence, the automated payment system provided managers access to reliable, real-time data that was consistent with the information held at the BISP regional offices. At the administrative level, it enabled officials to check and validate beneficiaries' payment information in real time. As soon as a beneficiary cashed out her payment, the information was instantaneously received by BISP administration for verification. As stated by the Director Operations,

> As it is a real-time system, the staff at BISP can check whether the money has reached the beneficiary or not (Director Operations, BISP).

At the users end, m-banking also enabled beneficiaries to check their payment details, and if there were any noted incidents of missed or delayed payments, beneficiaries could directly register their complaints with BISP field officers. This is mirrored in the words of the Director General of Payments at BISP,

> So m-banking gave us an edge that we could communicate with each beneficiary regarding her payment status. Before, Pakistan Post provided reconciliation after 3 or 4 months, and even in that, there were errors. In the digital delivery mode, there is no time lag and as it is a real-time system, we get real-time information on reconciliations- that is- whether the money has reached the beneficiary or not after disbursement (Director General of Payments, BISP).

Moreover, through the new mobile payment platform, beneficiaries' complaints were registered and efficiently resolved. As a result, there was a considerable reduction observed in the number of complaints recorded that diminished the administrative burdens for BISP officials as opposed to handling manual complaints. The Director General of Payments at BISP avowed,

> Initially, we did not have any state-of-the-art system for complaint redress- situational complexities started creeping in, and then we received complaints that postmen 'devour' money. So there was a mandatory requirement that a complaint redress mechanism needs to be

in place- m-banking has resolved it now and the number of complaints are significantly less (Director General of Payments, BISP).

Therefore, digital payment innovation was driven by the demand to enhance reporting rates and service delivery of payments in instituting an effective feedback system in the programme.

5.3.3 Efficiency and Security

The findings disclosed that digital payments afforded efficient delivery channels that visibly reduced transfer time, as the grant money instantly reached beneficiaries' digital accounts. Hence, it enabled BISP managers to transfer large volume of payments, efficiently to beneficiaries who resided in far flung areas of the country. This feature is attributed to digital payments that effectively decreased the intermediary steps in the disbursement process. The Director of Payments professed,

> The move from cash based payments to digital payments in the delivery of G2P ensures that payments are delivered to the actual beneficiary in a secure, quick and most efficient manner (Director of Payments, BISP).

Furthermore, the Director General of Cash Transfers resonated that m-banking facilitated BISP officials in serving millions of beneficiaries through secure payment modes. This was deemed critical, especially in regions, where political volatility was a potential threat for the disbursement process, amidst the security arrangements in the affected localities.

> M-banking provides a secure mode for making large volume transactions to beneficiaries in political volatile regions, and the monitoring system is overarching and efficient (Director General of Cash Transfers, BISP).

Hence, disbursing cash electronically reduced transaction costs for managers, in addition to the time and effort involved in sorting cash manually and delivering payments through entrusted intermediaries. Thus, m-banking by-passed human intermediaries in the delivery chain and transferred cash, instantly and safely, directly into beneficiaries' bank accounts. These findings conformed to studies that exhibited that programme managers were less reliant on security staff and intermediaries with the implementation of digital channels for disbursing social cash. This is because intermediaries no longer travelled extensively while carrying huge amounts of cash, so their vulnerability to ambushes was palpably reduced (Devereux and Vincent, 2010).

6. Conclusions and Contributions

The study shed light on the interplay between the external and internal institutional forces that influenced the social construction of digital payments in the BISP programme and its implications on management practices. In relation to the ICT for development discourse, it may be argued that digital innovation was conceived as a socio-political process that arose from local problems, albeit influenced by external actors in the course of its social construction. External influences shaped the design of digital payments in the programme, although organisational rules and norms were reaffirmed and challenged by political, economic, regulatory and international actors. Hence, the social construction of digital payments reflected on how shared interpretations, mutual interests and conflicts between social actors were exchanged and negotiated during digital innovation projects in the BISP programme.

For instance, whilst international donors imposed their own agendas on the political administration for securing transparency in G2P payments, these streamlined with BISP's organisational objectives to enhance governance through improved accountability procedures. These measures overall contributed to BISP's institutional strengthening. In addition, regulatory and economic forces provided the contextual inputs or resources that underpinned the branchless banking infrastructure for executing digital payments. As delivering cash payments presented security and transaction cost concerns for the government and BISP alike, digital innovation reduced the long term costs for both BISP and banks whilst expanding the outreach of payments for women residing in financially underserved populations in Pakistan.

Further, whilst economic actors also pressurised political actors for implementing digital payments in BISP, the political motivations of stakeholders aligned with BISP's institutional interests. It was showcased that by strengthening their business case through BISP disbursements, economic actors received financial gains. In the meanwhile, the transition to digital payments boosted the government's international standing, as through the BISP programme, they earned political mileage.

Hence, as contribution to the ICT for development literature, the study sheds light that digital innovation was *socially embedded* in the BISP context, so hence was *progressively transformative* for management (Avgerou, 2010). This was because technology was 'situated' in the organisational context for programme managers and enacted through usage. Hence, it was inclusive to management's objectives whilst concurrently aligning with donor's interests. Hence, the social construction of technology was a socio-political process that involved multiple social actors which predominantly shifted the equilibrium of power between local actors- BISP managers, politicians and bankers.

Hence, the primary objective for digital payment innovation was to alleviate the surmounting foreign pressure to secure transparency, visibility and efficiency in the delivery of large scale payments securely covering wider populations. These goals were seen to be paramount over

the financial inclusion objectives. From BISP's perspective, digital innovation was transformative (Avgerou, 2008; 2010) and driven by external and institutional forces. Consequently, digital payments reduced corruption or 'leakage' by governments as G2P payments were directly delivered into beneficiaries' digital accounts. Whilst technology eliminated 'human intermediaries' (politicians and postmen), it is concluded that digital payments introduced new intermediary structures of authority (banks and banking agents) to disburse social cash. This gives rise to the discourse that digital innovation created new structures that affected the power equilibrium of social actors within the payment chain. Whilst BISP transferred G2P payments to banks, banks onwards credited women beneficiaries' accounts, who cashed-out at banking agents, ATMs or POS devices.

In this context, Kemal and Yan (2015) argued that the discussion on m-banking in eliminating human intermediaries from the G2P delivery chain is two-fold. The agent infrastructure, at the front-end, for cashing-out G2P payments replaced former intermediaries, or 'middlemen' in the delivery chain. As new technologies mediated the cash-out process for beneficiaries, digital technologies inscribed new practices in its design. Studies also displayed how technology established a network of intermediaries, known as *innofusion intermediaries*, in order to promote inclusivity at the Bottom of the Pyramid (Foster and Heeks, 2013). This reinforces the argument that as a result of digital technologies, new structures of power may emerge at grass root levels in poor communities. Further, through a power lens, it is concluded that the creation of new intermediaries, resulting from digital payments, 'conditioned' new G2P practices as power was transferred from human intermediaries to new structures using technology in BISP communities in Pakistan.

Hence, as further contribution to the ICT for Development literature, the paper sheds light on the political aspects of digital payment innovation in the G2P sector, in contrast to previous technological deterministic approaches that framed the ICT innovation literature. Whilst empowering certain political actors, digital payments may 'disempower' other social agents involved in the disbursement of social cash. More interestingly, the study has implications for policy makers and governments as it provides lessons on how governments and international donor agencies may negotiate with each other in order to strike a balance between foreign and local developmental interests. For bankers and mobile operator staff, valuable insights are gained from this paper signifying how financially inclusive services may be offered to advance the financial inclusion agenda through digital innovation projects. Also, careful attention needs to be paid whilst evaluating the business interests of all stakeholder groups while adopting a multidisciplinary approach to ensure that precedence is not given to an exclusive group during digital innovation. Although this paper emphasised on the political nature of digital innovation in G2P programmes, to some extent, it may be correct to say that it overlooked the participation of users- a valuable stakeholder group that should not be neglected in the construction of future G2P digital inclusion programmes in any developing country.

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