

Research Article

Inclusive Capitalism and Development: Case Studies of Telecenters Fostering Inclusion Through ICTs in Bangladesh

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Abstract

Lack of sustainable approaches for public access venues such as telecenters has led to the emergence of several entrepreneurial and market-driven telecenter models in developing countries that are driven by multinational corporations, governments, and social enterprises. This trend falls under the rubric of inclusive capitalism, which argues that in the contemporary socioeconomic context, private investment and entrepreneurial activities are crucial for economic growth and job creation in developing countries. In this article, I undertake three case studies of telecenters in Bangladesh: a private-sector enterprise developed and operated by a multinational corporation, a social enterprise, and a public-private partnership. The case studies combine a review of organizational documents and an analysis of survey data. While a common feature of all three cases is the reliance on market mechanisms to provide affordable ICT services to the poor, the findings highlight how the initiatives approach the issue of inclusion differently. This article illustrates the convergence in thinking among various institutional domains of development about the indispensability of inclusive capitalism approaches to bring about socioeconomic development through ICTs.

Introduction

Since the turn of the century, developing countries have experienced a surge in the diffusion of new information and communication technologies (ICTs) such as computers, the Internet, and mobile phones.¹ Yet the pace and reach of this diffusion have been uneven across the developing world. Many people still lack access to the Internet despite the significant rise of mobile phone penetration over the last decade. In a context of widespread connectivity, those without access to ICTs risk exclusion from the benefits of the information society, leading to further marginalization. In such contexts, public access venues—that offer Internet and computers as well as other, related services to the general public—are still pertinent (Sey, Coward, Bar, Sciadas, Rothschild, & Koepke, 2015; Zainudeen, Perera, & Galpaya, 2013). For example, in many developing countries, telecenters make an important contribution to local socioeconomic development by providing low-cost local access to information and knowledge services. Despite their promise, however, many telecenter programs—mostly funded through international donor agencies—are unsustainable (Best & Kumar, 2008; Liyanage, 2009). Against this backdrop, several new telecenter models have emerged in developing countries based on entrepreneurial and market-driven strategies. Unlike donor-driven approaches, the new set of strategies are driven by multinational corporations (MNCs), governments, and social enterprises. In a way, these models have emerged from the three main “institutional domains of development landscape”: market, state, and civil society (Banks & Hulme, 2014, p. 181).

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1. Data from the International Telecommunication Union (ITU) indicate that from 2005 to 2015, the percentage of households with a computer has doubled (from 15% to 33%), and the percentage of households with Internet access has quadrupled (from 8% to 34%). Growth of mobile phones has been particularly dramatic: In the last 10 years the mobile subscription rate rose from 23% to 92% (ITU, 2015).

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While state, market, and civil society are not homogenous categories and often interact in complex ways, one of the most interesting shifts in recent thinking is the convergence of these actors around the need for a greater balance between the indispensability of market forces and the equitable distribution of services and benefits (Pieterse, 2010; Porter & Craig, 2004). One term that has been used to capture this convergence is *inclusive capitalism*. Proponents of inclusive capitalism argue that in the contemporary socioeconomic context, private investment and entrepreneurial activities are crucial for economic growth and job creation in developing countries (Prahalad & Hammond, 2002). Closely associated with inclusive capitalism are the bottom-of-the-pyramid (BOP) approaches, which call for MNCs to creatively offer products and services to poor and marginalized peoples and, in doing so, contribute to socioeconomic development. While BOP approaches and business models are informed by the values of neoliberalism (competition, efficiency, self-governance), they are also premised on an ideology of inclusion (Blowfield & Dolan, 2014). Telecenters have been a focus of various social enterprise models that look for a balance between economic goals and social goals. Finally, governments, after sitting on the sidelines for years, are showing a greater interest in undertaking market-driven ICT for development (ICT4D) interventions that provide affordable services to citizens in a sustainable manner.

The multiplicity of actors initiating these telecenters poses interesting questions about developmental objectives and the various mechanisms and processes adopted to achieve these goals. Development, as is well known, is a contested notion, and variations in institutional definitions of development can lead to different strategies for deployment and implementation of ICT4D projects in different contexts (Avgerou, 2010; Kuriyan & Bussell, 2007).

To shed light on how institutional definitions of *development* influence the design and implementation of development-oriented interventions, in this article I analyze three types of telecenters in Bangladesh: a private-sector enterprise developed and operated by an MNC, a social enterprise, and a public-private partnership. In focusing on the main motivations for creating telecenters in each of the cases, I draw out the differences in the ways each intervention works in practice and the perceived impacts on users. These are discussed in terms of how the different actors conceptualize development and the way these perceptions are viewed. As issues of equity have become cornerstones of development discourse and (ostensibly) of practice over the last two decades, I pay particular attention to the concept of *inclusion*—as a key element of development featured in all three institutional domains of a market-driven development landscape.

Bangladesh provides an intriguing context for exploring these questions. Beginning around 2005, the country experienced a rapid growth in ICTs, facilitated by market liberalization that encouraged significant private investment. The telecommunication sector as a whole is the largest recipient of foreign direct investment in the period 2005–2011 (UNCTAD, 2013). At the same time, there was a consensus among various stakeholders, namely civil society, government, and donors, that ICTs can play an important role in development. In 2010, the Bangladesh government announced the vision of “Digital Bangladesh,” whose objective was socioeconomic transformation enabled by ICTs. Many NGOs have been working on ICT-based services for improving health, education, and livelihoods. Overall, the ICTs attracted considerable interest from all sectors, arguably creating the necessary conditions for ICT-enabled development.

This article is structured as follows: The next section introduces the concept of inclusive capitalism, highlighting the convergence of market, state, and civil society actors from the ICT4D field. The concept of inclusion is elaborated further in the domains of ICT4D. The section following outlines the methodological approach of this article and describes the data sources. I then undertake three case studies, with information on the goals, scope, and perceived impacts of telecenter initiatives of MNCs, social enterprises, and public-private partnerships. In the concluding section I elaborate on some emerging reflections from the conceptual discussions and the case studies.

Inclusive Capitalism and Development: The Case of ICT4D

Rising levels of inequality among and within nations have put the scrutiny squarely on conventional capitalism, particularly in circumstances that expose commercial and corporate mismanagement and an obsession with profits. A key concern relates to how capitalism often leads to social exclusion for the world’s poor (Byrne,

2005). It is against this backdrop that the notion of inclusive capitalism has emerged, with a call for a market-oriented economic agenda that offers greater economic opportunities for those living in poverty.

One of the earliest expositions of inclusive capitalism posits that large corporations can improve the conditions of the world's poor by promoting commercial activity, employment opportunities, access to credit, and wealth creation (Prahalad, 2005; Prahalad & Hammond, 2002).² The proposition argues for a fundamental shift in the way the world's approximately 4 billion poor living at the bottom of the economic pyramid in the developing and emerging countries are viewed, recognizing them as "resilient and creative entrepreneurs and value-conscious consumers" (Prahalad, 2005, p. 1) who could be the engine of the next round of global trade and prosperity. A key premise of the BOP thesis is that the poor suffer from inadequate access to markets; therefore, there is a need to integrate them into the global economy through new models of financial inclusion, consumption, and entrepreneurship.

Debates on inclusive capitalism and development have centered on the faith put in business to generate prosperity and be a legitimate development agent (Blowfield & Dolan, 2014). Under the BOP thesis, the tension between corporate emphasis on addressing social challenges and a drive for profits is mitigated by the proposition that both can be achieved simultaneously. The mantra of "doing well by doing good" is nested in an emerging discourse on applying commercial business principles to social problems. International development institutions such as the United Nations Development Programme (UNDP, 2008) advocate for strategies for the simultaneous pursuit of revenues and social impact. Development institutions have urged a host of private actors to create more inclusive business models around the globe that will help create opportunities and improve the lives of many of the world's poor. The influence of the notion of inclusive capitalism saw BOP approaches seeping into the discourse and practices of state and civil society in addition to private-sector initiatives. In fact, the ecosystem of wealth creation to build the necessary conditions for inclusive capitalism comprises a broad range of actors, including businesses, governments, NGOs, social enterprises, etc., as well as organizational forms such as new business models, partnerships, modes of finance, and development assistance (Prahalad, 2005).

The Case for ICTs for Development

Knowledge has emerged as an important factor in global economic production and innovation. New ICTs such as the Internet and mobile phones enable people to access, use, and share information and knowledge at an unprecedented level. They also offer great potential for socioeconomic development, be it in education, health, or livelihood opportunities. According to Prahalad (2005), BOP consumers accept advanced technologies readily, and one of the key features of the BOP market is that it is connected and networked. These factors make ICTs for development particularly hospitable for inclusive capitalism. By the turn of the millennium, corporations and other private actors in ICTs had joined the poverty alleviation "business"—not as a byproduct of their operations, but as an explicit part of it (Ray & Kuriyan, 2012). The following literature review illustrates the point.

Many MNCs have undertaken initiatives that combine the goals of economic returns with community impact as part their core operations. Hewlett Packard's (HP) Mogalakwena HP i-community project in South Africa was designed as a sustainable business model that uses ICTs to create breakthrough models to improve literacy, job creation, income, and access to government, education, and healthcare services while realizing for HP both brand and business value (McFalls, 2007). In 2007, Safaricom, an affiliate of Vodafone and Kenya's largest mobile operator, launched the mobile phone money transfer application called M-PESA, which had the dual goals of deepening financial access by facilitating funds transfers (e.g., remittances from relatives, salaries, etc.) for the poor and being a self-sustaining commercial product (Kuriyan, Nafus, & Mainwaring, 2012).

There has also been a surge of interest in market-based ICT4D models from the nonprofit and governmental sectors, increasingly drawn by community demand and perceived economic benefits. A common modality of governmental interventions in ICT4D has been the public-private partnership, motivated by the need to

2. There are many views on the notion of inclusive capitalism. See, for example, the Coalition for Inclusive Capitalism website (<http://www.inc-cap.com/>) and Carney (2014).

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leverage and combine skills and resources from several organizations to achieve shared goals. The Indian government initiated “common services centers” to offer e-government and other services in rural areas, a prime example of such partnerships, where costs are shared between the government and private enterprise. Importantly, private enterprises encompass a wide range of actors, including small-scale entrepreneurs and MNCs. One of the most widely analyzed telecenter projects through a public-private partnership in India, the Akshaya project, was a partnership between the Kerala state government and private entrepreneurs to provide ICT services such as e-government services, online exams, and agricultural information through e-centers connected to a wireless Internet infrastructure (Kuriyan & Ray, 2009; Kuriyan, Ray, & Toyama, 2008). The Kerala state played a pivotal role, providing subsidies for the development of these telecenters and recruiting local entrepreneurs to run the centers, who rebranded themselves as capable of upholding business management principles and practices (Kuriyan & Ray, 2009).

The *social enterprise model*—applying commercial strategies to address social problems and market failures—also fits nicely under the rubric of inclusive capitalism. Specific to the ICT4D domain, many telecenters in developing countries have adopted a social enterprise or social outsourcing business model to offer ICT goods or services (Gurumurthy, 2010; Heeks & Arun, 2010). Several NGO-led initiatives, frequently with donor funding, created several small-scale telecenter programs, often on a pilot basis and with an explicit social/developmental focus. For example, the main aim of the village knowledge centers of the MSSRF (MS *Swaminathan* Research Foundation) in India is to empower largely unskilled, resource-poor rural farming and fishing communities to make better choices and achieve greater control of their own development through skills and capacity building for improved livelihoods, with an emphasis on community participation and promotion of access for women and those belonging to scheduled castes).

This brief exposition highlights the diversity of approaches among government, civil society, and private initiatives, reflecting a complex array of stakeholders and implementing partners with significant bearings on the operations, and management of telecentres and the types of services offered (Mukerji, 2008). Although this section broadly lays out some of the broad features of inclusive capitalism, with examples from ICTs for development that embrace its ethos, there is a need to look more closely at the concept of inclusion as a core developmental element of inclusive capitalism.

Inclusion and ICTs

The concept of inclusion (and exclusion) transcends socioeconomic, cultural, and legal dimensions as well as local and national contexts. Debates on inclusion have evolved from a focus on poverty alone toward an understanding of the causes and consequences of social (dis)advantages such as capability, deprivation, human rights, and social participation (Levitas, 1996; Sen, 2000). An important feature of inclusion is that it is possible to investigate it both in terms of structural factors and individual life experiences (Mervyn, Simon, & Allen, 2014).

In analyzing the intersection of inclusive capitalism and ICTs, I propose two overlapping dimensions of inclusion in this article. The first dimension relates to the concepts of digital inclusion and social inclusion and the links between them. Rooted in the belief that connectivity, notably to the Internet, is the most effective and efficient way to gain greater prosperity, *digital inclusion* refers to the access and ability to use ICTs, with an explicit focus on marginalized populations.

Against the backdrop of increasing connectivity, ICT practitioners are moving their focus from access to use of services. The concept of social inclusion, which emphasizes the effective integration of ICT4D purposes, captures the transformational potential of ICTs (Warschauer, 2002). Here, the main concerns relate to how ICTs can promote human development—health, education, political participation, and economic well-being—seeking to foster opportunities for the poor to increase material wealth. While the link between digital and social inclusion is highly relational in that digital inclusion is expected to lead to social inclusion (Sen, 2000), this link is often tenuous, owing to a host of individual and contextual socioeconomic factors (Bure, 2005).

The second dimension of inclusion relates to the integration of consumers and/or entrepreneurs into the BOP value chain. Inclusion at the consumer level is primarily about making ICT products and services more

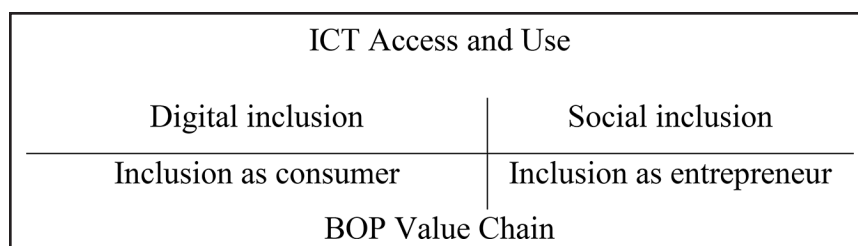


Figure 1. Dimensions of inclusion within inclusive capitalism and ICTs for development.

affordable and accessible, which in turn can facilitate additional benefits. While consumption of goods and services appears to be a narrow view of inclusion (Ilahiane & Sherry, 2012; Jackman, 2011), it nevertheless incorpo-

rates the potential benefits from such consumption, i.e., both digital and social inclusion. Examples include mobile remittances, employment information, and improved learning and healthcare.

Inclusive capitalism also highlights the productive opportunities afforded through integration into the global economy.³ Here, new business models allow local entrepreneurs to earn better incomes by selling ICT products and services within value chain of MNCs or other partnerships. A key focus here are employment and income-generating opportunities for marginalized and vulnerable groups, such as women (Dolan, 2012).

There is some overlap between digital inclusion and inclusion as a consumer in that both are concerned with access and consumption of ICT products and services. However, there is a nuanced difference between the two in light of their broader meanings: Digital inclusion is not only about physical access to an ICT product, but also the ability to use it (Rashid, 2016). Inclusion as a consumer involves an understanding of how and why people consume (Jackman, 2011). The combination of the two dimensions described above is presented visually in Figure 1.

Data and Methods

To examine this phenomenon more closely, I use a mixed methods multiple case study approach in which I analyze the organizational structures and users' perceptions of telecenter programs/initiatives of three entities in Bangladesh: a multinational telecommunications company (GrameenPhone Ltd), an NGO (Development Research Network, or D.Net), and a public-private partnership led by the Bangladesh government (union information service centers, or UISCs). The three cases were selected from telecenters initiated within the domains of the market, state, and civil society. While a multiple case study approach does not allow a direct comparison of the outcomes of various types of initiatives, it does allow us to gauge potential rudimentary differences and impacts.

The study includes two levels of analysis: the organizational aspects of each type of telecenter and the telecenter users. The case studies combine qualitative and quantitative data. A review of organizational documents is done to shed light on each program's stated objectives, implementation approaches, and broader organizational strategies. The documents studied include program websites and manuals as well as available studies focusing on the three telecenter programs.

The document review is complemented by an analysis of survey data from the "Global Impact Study of Public Access to Information & Communication Technologies" (IPAI), 2007–2012.⁴ The IPAI study aimed to generate evidence about the scale, character, and impacts of public access to ICTs in 12 developing countries, including Bangladesh (Sey et al., 2013, 2015). Relevant data from two surveys covered in the IPAI study are analyzed: the venue survey, which investigated the operational and financial characteristics of the public access ICT venues, and the user survey, which collected information about patterns of ICT access and use, ICT skills,

3. According to Prahalad, "entrepreneurship on a massive scale is the key" (2005, p. 2) to overcoming barriers to doing business, unlocking the potential of emerging markets. He argues that market development at the BOP will create millions of new entrepreneurs at the grassroots level—from women working as distributors and entrepreneurs to village-level microenterprises.

4. The study was carried out by a research team led by the University of Washington and sponsored by the Bill and Melinda Gates Foundation and the International Development Research Centre.

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and perceived impacts on those who used telecenters.⁵ The IPAI user survey is based on random sampling, selecting every n th person found in the public access ICT venues. An attempt to stratify the sample by an equal number of men and women proved difficult in Bangladesh. The cut-off was set at 12 years of age so as to include teenage as well as adult users. Age was not used as a stratification variable so that the true age distribution emerged from random selection. The user survey included a number of individual socioeconomic and household characteristics such as income, education level, etc.

Of the 148 randomly selected telecenter venues in urban and rural Bangladesh in the IPAI venue survey, 82 belonged to the three entities of interest for this article. While the IPAI survey did not include a variable to categorize these telecenters as private, state, or civil society, it was possible to identify them from their names. For the purpose of this article, I selected only those users from the 82 relevant telecenters from the venue survey, which resulted in 355 users included in this analysis.

As indicated above, both the IPAI venue and user surveys in Bangladesh are based on random sampling and are nationally representative. However, the reliance on a subset of that data from those surveys potentially biases the findings. In addition, selecting a subset of the data reduces the number of cases, which undermines the robustness of the findings. Of particular concern is the low number of cases of UISCs—the public-private partnership.⁶ The multiple case study approach adopted in this article that seeks to draw out broader patterns from each case and, where applicable, triangulate findings from quantitative analysis with other qualitative data sources offsets these limitations.

A Private Initiative: Community Information Centers—GrameenPhone Ltd.

In 2006, GrameenPhone Ltd., the largest mobile phone company in Bangladesh in terms of subscriber base, initiated the community information centers (CICs), whose vision is to “bring Internet and information based services to the unserved rural community” (cited in Sein, Ahmad, & Harindranath, 2008, p. 19). GrameenPhone is a joint venture between Telenor AS of Norway and Grameen Telecom, which is a subsidiary of the Grameen Bank, renowned worldwide for its microcredit projects. According to the Telenor website, CICs “are extending connectivity to those who have no alternative access to communication technologies and to those with little to spend on such services” (Telenor, 2013). From this perspective, CICs were conceived as a way to satisfy the information needs of poor rural communities at affordable rates. This developmental dimension, along with the fact that CIC operations are aligned with the core business of GrameenPhone, makes the CIC program a suitable case of MNC-led, bottom-of-the-pyramid intervention (Rahman, Amran, Ahmad, & Taghizadeh, 2014; Welle-Strand, 2008).

There are currently more than 500 CICs operating in 450 subdistricts of Bangladesh⁷ on a franchise model. CIC entrepreneurs are carefully selected by GrameenPhone based on the ability to invest—with the total cost of establishing one CIC around US\$1,000 (Liyanage, 2009). The entrepreneurs selected by GrameenPhone invest in the location, while GrameenPhone provides the brand name, promotional materials, and capacity building of the entrepreneurs. A CIC consists of one or two computers, printers, digital camera, web camera. The Internet service offered by CICs is provided by GrameenPhone’s mobile-based Enhanced Data Rates for Global Evolution, or EDGE, technology. The services offered by CICs include mobile and Internet communication; various government forms such as passports, birth registrations, agricultural information; and information related to local and foreign job search sites (Telenor, 2013). Some of the services are developed in collaboration with NGOs. One such notable service is the Fertilizer Recommendation Software (FRS), introduced through a partnership between Katalyst, an NGO, and GrameenPhone, which helps farmers select appropriate fertilizer for their crops (Gurstein, 2013). CICs also offer other GrameenPhone services such as mobile top-ups, which represent a large share of its revenues (Liyanage, 2009). However, GrameenPhone has concerns about the commercial sustainability of delivering FRS. Its impact as well as the impact of other services is unknown.

5. More information about the surveys, including detailed methodology and sampling frame, is available at <http://www.globalimpactstudy.org/surveys/>.

6. When the IPAI survey was carried out around 2010, these telecenters were beginning to be rolled out.

7. <http://www.grameenphone.com/about/corporate-information/corporate-responsibility/community-information-center>

Survey Findings

The IPAI survey included 38 CIC venues and 175 users. The venue survey data indicate that in addition to Internet communication, the most common services include scanning, printing, and preparing documents. A variety of value-added services are offered, including job placement services and in-house training offered by 62% and 38% of CICs, respectively. While e-government services are one of the stated services for CICs, only one of the 38 CICs from the sample reports offering such services. Only six of the 38 CICs in the venue survey are located in rural areas. One plausible reason for choosing urban locations in which to set up CICs is that rural areas may not be commercially sustainable. Nearly all the CICs in the sample are profitable. The venue survey also confirms that user and service fees are by far the top sources of operational funding for public access computing operation. In exploring the services that provide the most revenue, we found Internet browsing as the top source, followed by mobile phone-related services, including mobile set accessories sales and servicing and prepaid top-ups. Only three of 38 CICs had one female staff, while one CIC had two female staff.

I then explored the user survey to investigate the socioeconomic profile of CIC users. Four-fifths of the CIC users are men. A breakdown by age shows that the majority of respondents (around 60%) are between 20 and 34 years of age. Sixty-five percent of the users reported having an income. A look at the occupational status of the respondents reveals that 42% are students, followed by those with full- and part-time employment (31%) and self-employment (22%). Around half the users report income above the poverty line. CIC users are generally well-educated: 34% have post-secondary or vocational/trade schooling, while nearly 40% have tertiary education. This is well above the country's level of education, but not entirely surprising, given that a sizable proportion of the users are students. A total 68% and 91% of the respondents lack a computer and Internet connection at home, respectively.

Nearly 70% of the respondents who use CICs seek information on employment and business opportunities. A much smaller percentage of the users look for information on other value-added services at a CIC (31% on education, 11% on health, only 2% on government services). The user survey also investigated the perceived impact of telecenter use on several dimensions. From the sample, I found that CIC users report the most positive impacts on accessing resources and education as well as time and money saved. While saving time and money is a well-documented outcome of using ICTs, what is noteworthy is the impact the users perceive for human capital. More than 70% of the respondents point to positive impact in terms of access to resources and skills, while nearly 60% indicate using CIC telecenters has had a positive impact on their education. Significantly fewer respondents report a positive impact on health and accessing government information and services, which is unsurprising, given that such services are not commonly offered in most of the sample CICs.

A Social Enterprise Initiative: Development Research Network (D.Net)

D.Net is a registered nonprofit NGO in Bangladesh that focuses on applied research in ICT4D, poverty alleviation, and human rights. On its website, D.Net identifies itself as "a non-profit Social Enterprise fostering innovations for empowerment of marginalized communities with special emphasis on women and children focusing on technology and access to information and knowledge."⁸ Although D.Net depends on local and external donors for most of its funding, it increasingly applies the social enterprise ethos in its efforts to expand its revenue base and support its general operations. To that end, D.Net formed a separate commercial income-generating subsidiary, Multimedia Content and Communications Ltd. (Liyanage, 2009).

D.Net has a diverse range of telecenter initiatives (Hasan, 2008). Rural information centers (RICs) are conventional telecenters equipped with computers, camera, printer, and Internet access whose objective is to make livelihood information accessible to poor rural communities. RICs are hosted by a local NGO selected by D.Net. The NGO contributes to the logistics, set-up, and overall management, and D.Net provides some equipment, training, and access to digital content on livelihoods.

A key design element of RICs is facilitating access to information and knowledge for marginalized populations through a *mobile lady*, or *info lady*, typically a female information worker with a cellphone connected to a

8. <http://dnet.org.bd/page/Generic/0/6/1/165>

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help desk of experts on various livelihood topics (Raihan, 2007). Mobile ladies go door to door to reach remote rural communities and connect information seekers with RICs. Mobile ladies also connect customers to loved ones living abroad. They even perform tasks such as checking blood sugar levels and giving legal advice (Bouissou, 2013).

As part of its computer learning program, D.Net also introduced computer learning centers (CLCs) for secondary-level school students in Bangladesh's rural areas.⁹ Located at remote schools, each CLC contains four computers, a printer, an Internet connection, and a trained teacher for facilitation. Five hundred twelve teachers (20% female) were trained for CLC operations. The schools are responsible for providing the lab space and furniture; mobilizing the teachers, students, and community; and most important, managing the program. As of March 2015, 257 CLCs and 97 associate CLCs have been established in 56 districts.

Survey Findings

The IPAI surveys categorized mobile ladies, RICs, and CLCs separately. Given that mobile ladies have some unique characteristics and functions, they are analyzed separately in this article. The venue survey included 19 RICs, eight info ladies, and 10 CLCs. The user survey included 72 RIC users, 52 CLC users, and 32 individuals who received service from the info ladies.

Nearly all the telecenters in the venue survey are located in rural areas. Most RICs offer Internet access, printing, and document preparation for users, training, and job placement. While generally focusing on similar services, some info ladies also offer e-health services. Due to their nature as learning centers in secondary schools, CLCs focus primarily on training. In looking for top sources of revenues for computing operations, I found that RICs and info ladies rely on both user fees and support from D.Net, while CLCs rely more heavily on D.Net grants. This is also revealed in replies to the question on whether the telecenters are profitable or breaking even. While most RICs reported a profit, around half the info ladies and fewer than half the CLCs did. For RICs, info ladies, and CLCs, training is the service that provides most revenue. Info ladies also note video chat and Internet browsing as sources of income. More than half of all D.Net telecenters had one or two female staff (32% had one female staff and 24% had two female staff). Interestingly, while most info ladies are women, there are male info ladies as well.

Data from the user survey indicate that around two-fifths of the D.Net telecenter users are women. With a focus on secondary schools, 85% of CLC users are under age 19, while most RIC users are in their 20s and 30s. In terms of educational status, most CLC users report having a primary education, while most RIC users have a secondary education. While most CLC users are students, RIC users (including the info ladies) include both students and employed individuals, including self-employed and part- and full-time employees. An overwhelming majority of users do not have a computer at home, and a higher number lacked an Internet connection at home.

The type of information sought by most RIC and CLC users includes employment and business opportunities and education, respectively. Users seek a more diverse range of information from the info ladies, including education and health. Users of the different telecenter types report positive impacts in diverse domains. Most D.Net telecenter users report a positive impact on time and money savings. Around 60% of the D.Net telecenter users cite a positive impact on education. Similar to GrameenPhone's CICs discussed above, a small number of D.Net telecenter users report positive impacts in terms of accessing information and services from local and central governments. Info ladies appear to be the only source of health information among all the telecenters in the case studies: Nearly two-fifths of the users report positive impacts on health, a higher proportion than other D.Net telecenter users as well as CIC and UISC¹⁰ users.

A Government Initiative: Union Information Service Centers (UISCs)

In 2010 the government of Bangladesh, with support from the United States Agency for International Development (USAID) and UNDP, set up 4,501 UISCs. Two government agencies involved in the UISC project are the

9. <http://dnet.org.bd/page/Generic/0/6/1/145/54>

10. ICT-enabled service outlets are located at Union Parishads, Bangladesh's lowest tier of local government.

Local Government Division of the Ministry of Local Government, Rural Development and Cooperatives and the Access to Information program under the Prime Minister's Office. The objective of UISCs is to address supply-side and demand-side challenges associated with accessing public information and services (UNDP, 2012).

UISCs operate as a public-private partnership, with each UISC expected to be run by two entrepreneurs. By law, UISCs are required to be run by one male and one female entrepreneur. Around 9,000 entrepreneurs or employees are engaged in UISC operations. The entrepreneurs are self-employed; they are not paid employees of the Bangladesh government. UISCs provide three types of services: government services (e.g., birth registration, examination results), information services (e.g., health, agriculture), and commercial services (e.g. m-banking, life insurance, training, photocopying; Zainudeen et al., 2013). As all UISCs are colocated at Union Council Complex buildings, (rural local government facilities) the UISCs are in rural areas.

Findings from existing studies shed further light into the operations of UISCs. A study by Zainudeen et al. (2013) found that UISC users were also seen to be more often from higher income groups, suggesting that UISCs may not be reaching the poorest of the poor. This study also found that the proportion of women who use UISC services is lower than that of men. Of the total study sample, 60% of men have used a UISC compared to 35% of women. The study also found that UISCs play a significant role in providing government services. Although only 25% of poor UISC users have accessed citizen services, 71% said they had obtained information on government services through the UISC, either directly or through contacts made there (Zainudeen et al., 2013). The study suggests that UISCs seem to strike a good balance between operating independent of local government, yet connected to government.

Survey Findings

As both the venue and user surveys of the IPAI study have a low number of cases (seven UISCs and 28 users), related findings must be interpreted with caution. By design each UISC is supposed to have both a male and female entrepreneur; however, I found that none of the seven sampled had female staff. The two top revenue sources for UISCs are user fees and government support. There are no clear patterns in the types of services that generate the most income for UISCs, with training, Internet browsing, and ancillary services such as composing and printing being some of the offered services.

Around four-fifths of UISC users from the user survey sample were men. UISC users are generally young: 36% of the users are between 16 and 19 years old, while 25% are between ages 20 and 24. Fifty percent of the users have no income. A breakdown of users by employment indicates that most users are students. Around 40% have full- or part-time employment or are self-employed, while 10% are unemployed. More than 60% of users have post-secondary or tertiary education. Only around 10% of the users have computers at home, and none have an Internet connection.

I then explored the extent to which the respondents sought information on several development domains, including job and business opportunities, health, education, and government services. Nearly 70% of UISC users look for government services, followed by 20% who search for information on employment and business opportunities. The rest look for educational opportunities. Finally, a look at the perceived impact of using UISCs indicates that four-fifths of users report a positive impact on accessing resources and skills, and more than half report positive outcomes on education. Only one-fifth of users point to a positive impact with regard to accessing information and services from local and central governments. It appears that, generally, users do not get the desired services as most users who go to a UISC look for government information and e-services.

Analysis and Conclusion

Rapidly emerging ICTs present us with a compelling need to analyze inclusive capitalism, the idea that stimulating entrepreneurship and broadening consumer markets can ensure greater social and economic benefits for vast numbers of poor and marginalized peoples. Yet empirical investigations on how market-oriented, inclusive, ICT-driven, development interventions bring prosperity for the poor are still limited (Ray & Kuriyan, 2012). Although this article only scratches the surface of these issues, it does provide some insights by drawing on the findings of the three case studies of telecenter initiatives from Bangladesh.

Perspectives on Inclusion

Although a common feature of all three case studies is the reliance on market mechanisms to provide affordable ICT services to the poor, the findings highlight how, in some contexts, the initiatives approach the issue of inclusion differently. Findings underscore the important role of public access models such as telecenters to ensure digital inclusion. Most of the sampled users across the three types of telecenters lack access to computers and an Internet connection in their home, suggesting that, for many, telecenters could be the only viable options for connectivity. While mobile-based Internet networks are expanding across the developing world, questions remain about their affordability and reach in specific contexts. One such context is rural Bangladesh. From that perspective, D.Net telecenters and UISCs that serve rural areas are crucial as around four-fifths of all types of public access venues in Bangladesh are located in urban centers (Sey et al., 2013). With some 4,500 union councils in the rural areas of Bangladesh, the colocation of UISCs ensures a wide geographical reach.

As discussed earlier, access to ICTs, while crucial, need not be the only defining parameter for inclusion. A broader meaning of *inclusion* would also incorporate the role of ICTs in promoting human development that is more in line with the notion of social inclusion (Warschauer, 2002). The findings indicate that a significant proportion of those frequenting telecenters are students and that the greatest contribution of ICTs is improving education, with around half the respondents reporting a positive impact on education. While a certain level of educational background is needed to take advantage of ICT tools and resources, the findings nevertheless reiterate the important role of targeted training approaches such as school-based computer learning centers (CLCs) in areas where access is difficult. In the case of CLCs, using the physical infrastructure in place to cater to the digital training needs of youth is an inclusive design element. At the same time, the findings suggest that for those who are already better educated, it is more important to ensure access to ICTs than infomediaation—a process that combines a set of technological resources and coaching to meet users' information needs and communication capabilities (see Ramirez, Parthasarathy, & Gordon, 2013). Overall, this article underscores the important role of telecenters as venues of social inclusion that help foster human capital through new skills development and access to knowledge, be it for poor children or adults who still need education and professional training (de Carvalho, Feinberg, Klarsfeld, Lepicard, & Posthumus, 2012).

The telecenters operated by D.Net illustrate how digital and social inclusion can occur simultaneously by offering a variety of services beyond conventional telecenters such as info ladies and CLCs. The ability to offer more diverse services often necessitates a human intermediary of a certain educational attainment who acts as the interface between the technology and the end user, in ICT4D parlance, the *infomediaries*. By offering a variety of ICT-based and other services at the doorstep of rural communities (notably to women), info ladies are opening the doors to those who may otherwise be excluded from access. This encapsulates both digital and social meanings of inclusion by combining ICT access and knowledge brokering (Ramirez, Parthasarathy & Gordon, 2013). D.Net's comparative advantage lies in having a research focus to inform the design and content of its programs.

Two other areas of social inclusion that show promise are income generation and e-governance. GrameenPhone's CIC users come from more affluent backgrounds and report more positive impact on income, than D.Net and UISC users. While strong evidence exists on the link between connectivity and improving livelihoods (Adera, Waema, May, Mascarenhas, & Diga, 2014), the findings of this study point to an impact on gainful employment and income-generating activities facilitated through ICTs will be greater for those able to harness their networks. The UISCs initiated through a public-private partnership model have the potential to promote social inclusion by providing a range of e-government services, the only type of telecenter that may be able to play a vital role in implementing important government programs such as online registration and application of Bangladeshi workers seeking employment abroad (Government of Bangladesh, 2013). There is critical need for a closer empirical investigation to assess the use and impact of the services offered at UISCs.

The cases also reveal the integration of local entrepreneurs into the value chain as key agents of finance and service delivery, although to varying degrees and through varying mechanisms. CIC operations require a large economic investment by local entrepreneurs, and the return on investment is plausible by catering to more affluent users in urban and semi-urban areas. Another important characteristic of CICs is the service offered beyond the provision of computer and Internet use, notably mobile phone top-up services, a highly sought

business opportunity to sell GrameenPhone's lucrative mobile phone services. While such service may not be the main mandate of CIC, it is nevertheless a major revenue-generating source.

D.Net telecenters focus on serving marginalized populations as target groups and on promoting entrepreneurship for women. The info lady program focuses on women both as entrepreneurs and as beneficiaries who may face difficulties in moving outside of their homes. By and large, D.Net is sticking to its grassroots base, offering innovative services to marginalized and unreached people. However, D.Net is increasingly drawn toward the ethos of social enterprise as the challenges of scaling up its activities for greater impact loom large, requiring a delicate balance between social mission and economic sustainability. While UISCs are supposed to engage women entrepreneurs, to what extent this policy is implemented remains to be seen.

Market, State, and Civil Society: Toward a Division of Labor?

This article illustrates the convergence in thinking among various institutional domains of development over the indispensability of inclusive capitalism approaches to bring about socioeconomic development. Here, inclusive business or enterprise-based models are not only propagated by businesses, but also inform other approaches, including those undertaken by state and NGO actors. The three case studies of telecenters initiated by an MNC (GrameenPhone Ltd), a social enterprise (D.Net), and a public-private partnership (UISCs) undertaken by the state reflect this convergence. UISCs present a compelling case on the way governments are adapting to incorporate business approaches and principles, including rebranding themselves to appear more "businesslike" (Kuriyan & Ray, 2009). A UISC brochure—with the subtitle "Connecting the Bottom Millions"—reads more like a corporate slogan of a global telecommunications firm rather than a state-led program (Government of Bangladesh, 2014). Telecenters operated by D.Net—an NGO increasingly motivated by an ethos of social enterprise—highlight issues of scaling programs and organizational change, manifested in the delicate balancing act between providing affordable access to people and being commercially sustainable. Finally, GrameenPhone through its CICs illustrates how a growing number of commercial enterprises are taking development issues into consideration as part of their core operations (Blowfield & Dolan, 2014). By introducing innovative business models that aim to promote greater inclusion and entrepreneurship, corporations are going beyond corporate social responsibility to stake a claim as a legitimate actor in development.

A key emerging finding of this article is that the three types of telecenters originating from state, market, and civil society actors—in addition to having a difference in terms of modes of operation and of how inclusion is perceived—serve different socioeconomic groups. From that perspective, inclusive capitalism is not about market-vs.-state or whether markets are the only solution to the development problems; rather, inclusive capitalism is about how market-based approaches by various stakeholders such as businesses, governments, and other actors can contribute to social and economic development. It is then a matter of a division of labor by the three institutional domains (Martinussen, 1997). This perspective sees state, market, and civil society with the power to influence and set the agenda for development processes in particular contexts, bringing unique sets of capabilities and approaches. For countries such as Bangladesh, the multiplicity of approaches could mean more entrepreneurial and employment opportunities at the local level as well as a greater likelihood of leveraging ICTs for development for diverse segments of the population. The new forms of organizational alliances and partnerships required in the context of emerging market-based innovations and entrepreneurship are arguably the greatest strengths of the idea of inclusive capitalism. ■

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