### Notes from the Field

# Incorporated Citizens: Multinational High-Tech Companies and the BoP<sup>1</sup>

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#### Abstract

In this article, I examine HP's e-Inclusion program and its implementation in India to show how the high-tech industry's efforts to alleviate poverty profitably are guided by C. K. Prahalad's ideas about the Bottom of the Pyramid (BoP), and are framed as digital corporate citizenship activities. While the BoP highlights the importance of new markets for high-tech companies, the discourse of digital corporate citizenship creates an enabling environment in which transnational high-tech companies can gain political access to new consumers at the BoP. The resulting digital corporate citizenship/BoP nexus leads to the extension of governments' bureaucratic reach and the formation of electronic entrepreneurs.

HP's (formerly Hewlett-Packard) e-Inclusion initiative was launched by Carly Fiorina, who was the company's CEO from 1999 to 2005, at the 2000 Creating Digital Dividends Conference in Seattle, Washington. The conference brought together corporate executives with technology visionaries and representatives from multilateral development organizations to discuss how the global digital divide could be transformed into a digital dividend.<sup>2</sup> Fiorina beamed in via satellite to announce that HP had developed a "major new corporate initiative to reach the emerging market economies . . . and we are focusing it directly on the rural poor in Africa, Asia, Latin America, and Central Europe" (Fiorina, 2000). At the height of the Information and Communication Technology for Development (ICTD) "hype," Fiorina's own grandiose claims had social and material effect (Mazzarella, 2010, p. 784). This paper examines some of these effects, focusing on e-Inclusion's first i-community in Kuppam, in the Indian state of Andhra Pradesh.

Among those listening to Fiorina was C. K. Prahalad, who, on the second day of the conference, laid out a roadmap showing transnational high-tech companies how they could make what he called "the fortune at the bottom of the pyramid" (Prahalad, 2005). In 2000, his writings about what has come to be known as the BoP were just beginning to gain trac-

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tion. That, four years later, the successor to the Digital Dividend conference was called Eradicating Poverty Through Profit shows how quickly the BoP idea became a widely embraced corporate strategy aiming to combine profit-making with the alleviation of poverty. By Prahalad's own account, it was HP's e-Inclusion initiative that was central to this transformation (Kirkpatrick, 2001).

E-Inclusion was also HP's flagship Global Citizenship initiative—a showcase program that underscored the company's leading position in the area of digital corporate citizenship (Schwittay, 2009). "Digital corporate citizenship" refers to the efforts of the high-tech industry to close the global digital divide by bringing ICT access to the world's poor (Smith, 2002). A transnational high-tech company headguartered in California's Silicon Valley, HP has a long-standing reputation of being a responsible company, based on the example set by its cofounders Bill Hewlett and David Packard, who included "good citizenship" in their first corporate objectives in 1957 (Collins & Porras, 1994; Packard, 1995). The company is thus a good place to study the articulation of digital corporate citizenship and corporate BoP activities, which I call the digital corporate citizenship/BoP nexus.

In this article, I argue that the high-tech industry's efforts to alleviate poverty profitably have been guided by the BoP concept and framed as digital corporate citizenship activities. While BoP ideas highlight the importance of new markets for the continued existence of high-tech companies, the discourse of digital corporate citizenship creates an enabling environment in which transnational hightech companies can access new consumers at the BoP. In the challenging terrain of emerging markets, such access not only encompasses technical infrastructures, such as distribution channels, marketing campaigns, and financial schemes, but it also includes political access. The latter has to be negotiated through governments at national, state, and local levels, where political elites frequently act as gatekeepers of the poor. Foreign companies often find it beneficial, even necessary, to work with and through these elites.

It is here where the language of citizenship becomes significant. The first part of this paper examines the discourse of digital corporate citizenship as one instance of global corporate citizenship (GCC) and shows its linkage to BoP strategies and regimes of neoliberal citizenship materializing in the constitution of entrepreneurial development subjects. The corporate framing of e-Inclusion illustrates how digital corporate citizenship initiatives allow transnational high-tech companies to present themselves to developing countries governments as responsible and trustworthy partners (Kirkpatrick, 2001).

Neoliberal corporate and government efforts converge around a shared modernization narrative of the inevitable expansion of capitalist consumer society and technological information society through the transfer of Western administrative, business, development, and technological models. The second part of this article argues that transnational high-tech companies contribute to developing countries governments' efforts at modernization and state or party building. Drawing on e-Seva, the e-governance initiative instituted in Andhra Pradesh under Chandrababu Naidu, it shows how HP's participation in the implementation of e-Seva by way of the Kuppam i-community helped to bring previously excluded citizens into the government fold.

E-governance programs incent citizens to become ICT-literate. Both governments and companies want to produce the knowledge workers of tomorrow, who can attract high-tech investments and work in the resulting software development, IT support, and call centers. These knowledge workers also start consuming technologies, and transnational high-tech companies are keen to access promising new markets. The third part of this article examines two i-community projects that expanded ICT delivery and consumption in Kuppam through microentrepreneurial initiatives, which also created new sources of income for their poor participants.

# Methodology

This article is based on interviews with e-Inclusion employees, as well as linguistic and visual analysis of various genres of HP's communication concerning its e-Inclusion activities. At the company's headquarters in Palo Alto, California, I conducted in-person, openended interviews with 12 e-Inclusion employees in 2003, ranging from the last remaining e-Inclusion co-founder to project managers responsible for individual e-Inclusion projects, to communications managers and personal assistants, to Debra Dunn (at the time, a senior vice president at HP). I also conducted two phone interviews with project managers based in San Diego, California, and Oregon. In addition, I interviewed the other two e-Inclusion co-founders who had left HP in 2002. Interviewees were recruited through personal contacts, email requests. and referrals that followed concluded interviews. Through these referrals, I was inserted into the network of former and current e-Inclusion employees. and for some of the interviewees, it became a welcome opportunity to reflect on the program and their role in it. Conversations lasted between 30 minutes and two hours and focused on the interviewees' respective roles within e-Inclusion and their experiences of their work, as well as how the program fit into their personal lives and passions. Several interviews led to subsequent email conversations commenting on the transformation and eventual demise of e-Inclusion. The arguments in this article are based predominantly on data provided by these interviews.

In addition, I carried out an extensive linguistic and visual review of all documentation related to e-Inclusion and the i-community. This included internal company memos, promotional videos, reports and brochures, Internet resources, and newspaper and journal articles, as well as speeches by senior leadership. The rhetorics on display in this documentation are not neutral representations of objective reality, but carefully crafted acts of corporate communication. They contain aspects of demonstration as "'technical, ethical and spatial practice" (Barry, 2001, p. 176) that aim to make HP's ethical conduct visible. The labor involved in these processes of construction becomes invisible, however, when the final product is presented to the public. This article, therefore, pays special attention to the work of authorship, to disrupt notions of a homogeneous entity called HP.

In February 2003, I went to India as a consultant for the World Bank Institute's Corporate Social Responsibility (CSR) program. Tasked with establishing contacts that would eventually lead to the program's operations in India, I interviewed corporate executives, government ministers, and business school professors about Indian ideas of CSR. Officials in Hyderabad, Andhra Pradesh's capital, were eager to present their high-tech achievements to a World Bank representative. The Kuppam i-community, which was just getting off the ground after a slow start, came up in a number of conversations, and because of my academic interest in the project, I was able to interview the two state-level government officials assigned to it. They introduced me to the freshly recruited Indian HP i-community manager, whom I was able to interview subsequently in Bangalore. Together, we took a day trip to meet the newly hired on-site manager in Kuppam, to inspect a number of possible rentals for the local i-community office and guesthouse, and to participate in a training session for the village photographers. Building on this site visit, I conducted followon interviews in Silicon Valley with another Indian HP employee who had been involved in establishing the i-community, as well as the U.S. manager of the village photographer project. This article, therefore, presents an analysis of HP's and its employees' representations of the Kuppam i-community, rather than one of the perspective of Kuppam residents involved in the program.

## The Digital Corporate Citizenship/ BoP Nexus in Theory and Practice

E-Inclusion started as a global program that initially worked in smaller countries, such as Costa Rica and Senegal (Braund & Schwittay, 2006). After operating for 18 months without producing the required returns on HP's investments in it. e-Inclusion underwent a strategic reorganization that resulted in a shift to larger markets, such as India (Schwittay, 2011). To contextualize these dynamics, I first situate digital corporate citizenship as one instance of Global Corporate Citizenship (GCC) and draw out its relation to the larger political project of neoliberal citizenship. Correspondingly, e-Inclusion was frequently presented by HP senior leadership as contributing to the fostering of entrepreneurship among the poor-which, according to Prahalad, is a solution to global poverty.

### Corporate Citizens at the BoP

While GCC is a relatively new phenomenon (Schwab, 2008), its practices are the result of the technicalization of preceding forms of corporate social engagements, such as corporate philanthropy and corporate social responsibility (CSR). Over the last 40 years, these have been increasingly codified and systematized, as well as strategically tied to corporate objectives and ways of operating (King, 2001). GCC manifests itself in hybrid business-social programs that have two objectives: 1) to bring social

benefits to targeted individuals and organizations, often in the form of their economic or educational improvements, and 2) to produce demonstrable benefits for companies. These can take many forms, including good publicity, brand awareness, employee motivation, new product development, and market expansion, but they must ultimately translate into financial bottom-line growth. The digital corporate citizenship/BoP nexus is one example of GCC in action.

The study of GCC has, until now, been the purview of business academics, who have produced mostly prescriptive accounts of best practices. More theoretical articles have shown how the language of corporate citizenship, especially in comparison to the previous discourse of the social responsibility of corporations, legitimizes their attempts to limit public oversight. "Citizenship sounds more positive than CSR and yet can be a more minimalist, voluntarist notion, with natural liberty and freedom of contract overtones that conceptually limit externally imposed responsibilities" (Windsor, 2001, p. 47). Wood and Logsdon (2001) agree that, in contrast to the obligatory overtones of CSR (see Reich, 1998), corporate citizenship's weak legalism accords with dominant ideologies of neoliberalism and compassionate conservatism.

Matten and Crane posit that GCC should more accurately be called "the corporate administration of citizenship" (2005, p. 73). They argue that the failure of some nation-states, under strain from globalization and deterritorialization, to provide basic citizenship rights to the poor leads to corporations stepping into the void, motivated by ensuring a functional operating environment for themselves. Social rights, which are limited by foreign direct investment and concessions made by governments to attract transnational corporations (TNCs), are provided when the same companies deliver employment and welfare services. As civil rights become curtailed by global financial markets, TNCs can encourage governments to respect these rights. Lastly, political rights constrained by the action of the World Bank or IMF can be channeled through lobbying activities. The authors fail to note the fact that the described failures of nation-states are often caused—directly or indirectly—by the actions of the very companies that then come in to help out.

The corporate administration of citizenship raises more questions than it answers: What happens when it is not in the interest of companies to provide public services? If corporate citizens take over government functions, how can they be held to the same standards of public accountability as governments? Who benefits from such corporate acts of administration? Matten and Crane's (2005) definition also partakes in the widespread assumption that the spread of economic and financial globalization necessarily leads to the weakening and retreat of governments. As this article shows, the digital corporate citizenship/BoP nexus complicates this picture, because corporate work at the BoP, in the name of GCC, can actually strengthen governments' actions.

The literature on the BoP echoes the GCC literature in its managerial focus on best practices for implementation, spearheaded by Prahalad and various co-authors (London & Hart, 2004; Prahalad & Hammond, 2002; Prahalad & Hart, 2002). Conversely, a number of scholars, foremost among them Prahalad's colleague Karnani, have been critical of claims that it is possible to eradicate poverty through profit (Jenkins, 2005; Landrum, 2007). Karnani dismisses this theory as both a "harmless illusion and dangerous delusion" (Karnani, 2007, p. 92). For one, there is no fortune to be made at the BoP, and Prahalad can only claim otherwise because he is inconsistent about the exact size and location of the market to be found there. This argument has given rise to a number of BoP market seqmentation studies (Hammond, Kramer, Tran, Katz, & Walker, 2007; Rangan, Chu, & Petkoski, 2011). Prahalad is also misguided in his advocacy for the poor, who operate with limited education and information, being able to make their own purchasing choices (Karnani, 2008). Most dangerous, however, is Prahalad's promotion of empowerment-lite, most visible in the form of skin-whitening cream for poor Indian women. Instead, Karnani argues, women need improved access to education, increasing income through steady employment at living wages, and more equal gender relations (Karnani, 2009).

In spite of this debate, there has been a dearth of empirical studies of BoP implementation on the ground (Kuriyan, Ray, & Toyama, 2008). Kuriyan et al.'s investigation of the Akshaya kiosk program in Kerala, India, showed the tensions within the state and among kiosk operators as one of the challenges of achieving social development and financial sustainability. Studying the digital corporate citizenship/BoP nexus as a "historically specific assemblage of technologies, actors and ideologies that generates emergent potentials" is thus a future task of ICTD and BoP scholars (Mazzarella, 2010, p. 784).

#### Framing e-Inclusion

In February 2004, Dunn gave a talk at the Haas School of Business at the University of California, Berkeley, as part of the student-organized CSR speaker series. In front of a sympathetic audience, Dunn presented a conceptual framework for the e-Inclusion program. As had become evident in earlier interviews with e-Inclusion employees, this framework was the result of the collaboration of a number of individuals. It also drew on the history of the program until then, including failed starts in a number of sites, the firing of a co-founder due to power struggles over the program's leadership and direction, the voluntary departure of two disillusioned project managers, and a strategic reorientation toward more promising markets (Schwittay, 2011). Any traces of these contestations and the social relationships on which they were based, as well as of the collective labor that went into the construction of the framework, had disappeared when Dunn gave her talk at Haas. Instead, she presented easily portable, schematic representations that gave the impression of hierarchy, order, and control. The result was one of detached observation and authority (Riles, 2000); the presentation reaffirmed HP's leadership position in the GCC area.

According to the framework, e-Inclusion was divided into three types of programs. First were "worldwide development projects," foremost among them e-Inclusion's efforts to increase the efficiency and reach of microfinance through ICT. As the leader of the United Nations' ICT Task Force Working Group on Business Enterprise and Entrepreneurship, Dunn had learned about microfinance's potential for poverty alleviation, based on giving (predominantly female) entrepreneurs access to small amounts of capital. HP regarded microfinance as a promising area to reap financial returns from its e-Inclusion investments, hoping that commercial banks in developing countries would enter the fray to serve millions of potential customers in emerging markets (Firpo, 2008).

A second program type was "focused repeatables," which were small projects created

with replicability and scalability in mind to fulfill e-Inclusion's global promise. One example was a micro-enterprise initiative that aimed to build the capacities of small-scale entrepreneurs through ICT provision and training. And then there were e-Inclusion's "showpieces" of "deep engagement," which Dunn defined as "living in the project places, talking to customers on a daily basis, and helping them to know what can be possible." The Kuppam i-community fell into this category.

All three program types focused on entrepreneurship, because HP saw unleashing the entrepreneurial capabilities of individuals as key to economic improvement and community sustainability, which was presented as e-Inclusion's overall objective. In a (probably) unintended double meaning, e-Inclusion could thus be read as standing not only for electronic, but also entrepreneurial, inclusion. This emphasis on entrepreneurship echoed Prahalad's claim that "entrepreneurship on a massive scale" would be the solution to global poverty (2005, p. 2).<sup>3</sup>

Transnational high-tech companies can contribute to this solution by providing the poor with highquality, affordable consumer products, which would lessen their dependency on exploitative middlemen and the poverty penalty they charge (Prahalad, 2005). Being recognized as corporate customers would also give the poor dignity and raise their selfesteem, which in turn would enable them to unleash their natural capacity for entrepreneurship, and ultimately, to lift themselves out of poverty. In their neoliberal focus on market participation through consumption and enterprise, Prahalad's ideas constitute a marketization of poverty that cannot acknowledge or alter its structural causes (Schwittay, 2011).

In spite of criticisms of the BoP model, corporate leaders have embraced Prahalad's ideas at a time when traditional markets for their products have become saturated, and Fiorina was one of his earliest followers. One way in which HP aimed to access these markets was through courting public sector organizations, which, until then, had been marginal to the company's business.<sup>4</sup> Developing country governments, especially those that embraced ICT as a

<sup>3. &</sup>quot;I-community" stood for "inclusive community," which was reminiscent of Prahalad's "inclusive capitalism." 4. In early 2004, HP established a global public sector organization in addition to its three organizations targeting consumers, enterprise, and small and medium business segments. This organization both formalized and focused the company's engagement with governments and other public organizations, and moved them into the mainstream business.

way forward, were central among these organizations.

# Naidu's High-Tech Dreams

A few months after the Creating Digital Dividends conference where Naidu had first learned about e-Inclusion, Fiorina advertised the program during a speech before the Confederation of Indian Industries, the country's leading industry association. In a press release accompanying her visit to India, HP announced that "through its World e-Inclusion initiative, HP is focusing on delivering information solutions that bridge the digital divide and address the needs of India's underserved" (HP, 2001). At the same time, the search for an appropriate site for e-Inclusion's first i-community started. When Andhra Pradesh (AP) was finally selected, it was due in part to the result of Naidu's personal lobbying for his state, together with his efforts to use ICT to modernize it. This part of the article examines these efforts, which centered on e-Seva, an ambitious e-governance program that Naidu sought to deliver to his rural constituents by way of the i-community.

### The CEO of Andhra Pradesh

Having assumed leadership of AP in 1995, Naidu carefully crafted his political image as a reformer around modern management practices and ICT use, and actively sought to distinguish himself from his charismatic and paternalistic predecessor (Mooij, 2003). Calling himself the CEO of AP, Naidu wanted to run his state like a company—efficiently and business-like, with an emphasis on performance and its evaluation (Bradsher, 2002).

As a strong believer in the potential of ICT and high-tech companies to bring economic development to AP—a traditionally underdeveloped state with a large agricultural base-Naidu aimed to create a rival to India's Silicon Valley of Bangalore. To this end, Hi-tech City was established as an IT park at the outskirts of AP's capital, Hyderabad, and its Cybertower dominated government advertisements. Naidu argued that "without technology you cannot have progress," and that ICT could contribute to leapfrogging in development (Naidu & Ninan, 2000, p. 14). During his time in office, the number of graduating engineers rose from 7,500 to 65,000; many of these engineers were trained in private IT schools that mushroomed across the state (Xiang, 2006). Correspondingly, software exports from AP

grew from Rs. 1.34 billion in 1996–1997 to Rs. 36.35 billion in 2002–2003, but still lagged greatly behind Karnataka's (Mooij, 2003).

To make his state more attractive to foreign investment, Naidu instituted economic and government reforms around his vision of Simple, Moral, Accountable, Responsive, and Transparent (SMART) government. Not surprisingly, the use of ICT was central to these efforts, which materialized in e-Seva (literally, "e-Service"), Naidu's ambitious e-governance program designed to improve his administration's bureaucracy and citizen outreach. E-Seva was also a way in which the corporate idiom of efficiency could bolster Naidu's CEO claims (Mazzarella, 2010). E-Inclusion and the Kuppam icommunity were vehicles for bringing e-Seva to the countryside. That the i-community was eventually implemented in his own constituency of Kuppam shows that, in spite of his discourse of modern management, Naidu was no stranger to old-style populism, especially during election times (Mooij, 2003).

In February 2002, Fiorina and Naidu officialized the i-community by signing a memorandum of understanding. While this document remains confidential at the request of HP, the subsequent AP government order was posted on the Internet, and it gives some clues as to Naidu's objectives for the i-community. The program's main aims were listed as the following: researching ICTs for Indian conditions, providing affordable Internet access, using public-private partnerships (PPPs), showcasing rurally relevant technologies, targeting rural women, and IT training (Government of Andhra Pradesh, 2002).

This government order deserves a close reading for several reasons. Its language of e-governance reveals that Naidu's ambitions went beyond the mere provision of his government's services through the electronic medium (commonly referred to as e-government), to a change in the ways in which he wanted to govern his population. As a government slogan proclaimed, he wanted to "make a stakeholder of every citizen," and e-Seva, by making his administration more accessible, was an important part of this decentralization of government activities (Reddy, 2002). With access comes responsibility, and a citizen actively participating in the process of governing is another facet of the neoliberal entrepreneur of the self (Rose, 1999), this time constituted at the digital corporate citizenship/BoP nexus. The list is also a good representation of how governments aim to build rural information societies. In India, these efforts are framed by a discourse of "cyberlibertarian developmentalism," which articulates capitalist development and technological achievement in a national modernization narrative that has a history of statist, technocratic solutions (Mazzarella, 2010; Sreekumar, 2007, p. 2). Naidu couched this narrative in the language of development—from agricultural backwater to hightech vanguard—and his policies were a way of operationalizing this narrative.

According to an Indian HP employee, who spent much time in late 2001 and early 2002 flying between California and Bangalore to set up the Kuppam i-community, Naidu's high-tech dreams made him an attractive partner for HP. His constituency fit the bill in more than one way. Its location a half-day's drive from Bangalore made its management from HP Labs India relatively easy. Its population was judged to experience just the right level of poverty to make it amenable to HP's interventions. Most important, though, through e-Seva, which had been developed through a government PPP with two local high-tech companies, Naidu had shown his willingness to work with the private sector. He became a personal champion of the i-community, which he saw as a way to bring e-Seva to his rural constituents.

### E-Governing the Countryside

An HP leaflet promoting the i-community stated that, "it is focused on providing better governance through technology. The i-community brings about a convergence of the various facets of the community—the citizens, the bureaucracy and the government, aiding participation and increased cooperation" (HP, 2003). All HP projects in Kuppam were to contribute to this overall aim of bringing Kuppam residents into the government fold as involved and cooperative citizens. This reveals e-governance programs as a means to govern active populations more effectively; serving them better is also a way to increase governmental control.

At the heart of these efforts was Yojanalu, a community Web portal created by HP that provided access to various government schemes, as well as information about their benefits, target populations, and eligibility criteria in English, Hindi, and Telugu (HP, 2003). The website could be accessed in various community information centers (CICs) with the help

of specially trained operators. There was also a mobile bus that brought computers and Internet access to outlying areas; in the evenings, it showed Bollywood movies, which were paused to broadcast public service announcements to a captive audience. In addition, a literacy program to test people's reading and writing skills was to contribute to Naidu's goal of achieving 100% literacy in AP by 2007 (Prahalad, 2005). While all of these initiatives contributed to Naidu's goal of modernizing AP, e-Seva and Yojanalu were of central importance to it.

Initially, the portal's users were able not only to learn about, but also to apply for government benefits online. A case study about Kuppam, conducted for the second World Summit on the Information Society, claimed that more than 2,500 applications for ration cards had been submitted via the website (WBCSD, 2005). Because these ration cards serve as de facto ID cards, they formally incorporate their new owners into the domain of the state. In this way, HP's work in Kuppam helped to strengthen and extend the bureaucratic power of the AP government. To the extent that it made AP's government services more accessible, it also incented rural citizens to use ICT, which, in turn, linked with Naidu's project to create an ICT-literate population. In other words, rather than weakening the hold and power of the AP government, HP, like a good (corporate) citizen, assisted the Naidu administration's efforts at state building and modernization.

Besides the convenience of paying bills and applying for public benefits online, e-governance programs hold the promise of creating more transparent and less corrupt governments. This remains an elusive goal, however—in part, because corruption is a political problem not amenable to technological solutions (Parthasarathy & Srinivasan, 2006; Sreekumar, 2007). On the other hand, e-governance programs are a prime example of neoliberalism's tendency to recast "governing activities . . . as nonpolitical and nonideological that need technical solutions" (Ong, 2006, p. 3). By literally technicalizing the actions of government, e-governance programs move these actions into the hands of technocrats concerned with the efficient management of populations. The result is an erasure of the political element of governing and its replacement with technical, mainly administrative, procedures. This

depoliticization is especially visible in the case of dissent.

### **Electronic Grievances**

One service offered by Yojanalu was a public grievance system that allowed Kuppam residents to lodge their dissatisfaction with the government by way of the Internet (HP, 2003). Providing such electronic channels for citizens to voice their complaints is widely seen as making governments more accountable, implying "a kind of grassroots mobilization" (Mazzarella, 2010, p. 790). It is guestionable, however, whether a complaint sent by email is really more effective than one submitted in person or via traditional technologies, such as the phone (Dossani, Misra, & Jhaveri, 2005). In making such claims, technologically focused ICTD scholars run the danger of prioritizing the technological means of communication over its content (Sreekumar. 2007). The question becomes whether government behavior really changes as the result of ICT use, when it is more likely that what is altered is only the channel of communication. It is not the means of communication, but its content and destination points that matter.

More important, electronic grievance systems contain public dissatisfaction in routinized and manageable ways. The aim is to turn potentially disruptive sentiments into nonpolitical administrative procedures that can be dispensed with through seeming efficiency and responsiveness. This is part and parcel of a larger process of depoliticization, which, on the one hand, results from the technocratic nature of the development apparatus, and on the other, from the reductionist effects of technology (Ferguson, 1995; Moodley, 2005).

There are important parallels to the technicalization of corporations' ethical conduct that results from GCC programs. Companies aim to routinize processes of public oversight through social audits, codes of conduct, and ethical branding, all in an effort to control the social and political environment in which they operate (Barry, 2004). HP under Fiorina was masterful at creating the image of an ethical company, and e-Inclusion was of strategic importance in these imaginings. This is not to say that the transformation of democratic governance processes into technical ones is always successful. Technological containment can and does fail, as Naidu and HP found out for themselves (see Reddy, 2002).

In early 2004, disenchanted rural voters chose the political route to make their disapproval of the government heard, voting Naidu and his Telugu Desam Party out of office. His high-tech dreams had done little to improve their livelihoods, which were threatened by sustained drought, lack of irrigation systems, and falling crop prices. Losing its main champion in the state government had negative repercussions for the Kuppam i-community, which came to focus more on economic development and was slowly scaled down until it was handed over to another organization (Dunn, guoted in Braund, Frauscher, Petkoski, & Schwittay, 2007, p. 31; Schwittay, 2008). Naidu, who had carried his own constituency during the election, became Kuppam's mayor. While a direct link between these political developments and the i-community remains elusive, the latter had surely contributed to Naidu's popularity with his home constituents. This is especially true for those who benefitted directly from i-community projects.

# **Electronic Entrepreneurs**

E-Inclusion's partnerships with developing countries' governments was one way in which the program aimed to build access to the BoP. This was complemented by a more direct approach of working straight with the poor through pilot projects that tested new products and services in the "emerging markets laboratory" provided by the Kuppam i-community (Dunn & Yamashita, 2003, p. 48; Schwittay, 2008). These pilots recruited local participants, often from existing organizations, with the promise of additional sources of income and, potentially, new areas of self-employment. This part of the article shows how in Kuppam, community information center (CIC) operators and village photographers sold ICT services, helped the AP government know and serve its rural citizens better, and became electronic entrepreneurs who spread awareness of HP's products and brand.

### Accidental Citizens

In 2003, the *Harvard Business Review* published an article co-authored by Dunn introducing the i-community to the readers of this prestigious journal (Dunn & Yamashita, 2003). The article was another high-profile way in which HP's e-Inclusion work was validated and legitimized by the academic business community. As a case study, it contributed to the

growing managerial BoP literature by turning HP's learnings in Kuppam to date into best practices.

In the article, a special section called "An Hour in the Life of an Information Center" presents an idealized slice of activities at the CICs:

Chelliah is a typical walk-in customer . . . [who] needs to photocopy [some] documents. As Uma Rani [the CIC operator] begins the copying, she . . . takes a moment to apprise him of the new services he can apply for at the center via the HP i-community portal. She asks if he has heard about the government's program for retired teachers. He hasn't. After getting a little more information from him, Uma Rani prints out a list of programs he might avail himself of. Before Chelliah has left, an application for the program for retired teachers has been submitted electronically and acknowledgment of the submission has been received. (Dunn & Yamashita, 2003, p. 49)

The CICs were the technological backbone of the icommunity, since it was here where Kuppam's poor could access the Internet by way of HP's technology. Interestingly, what often brought them into the centers was not the need to browse the Web, but to make a phone call or some photocopies.

The CICs were run by young men and women who had been trained for one year in computer skills and business management by the local branch of an international NGO with which HP collaborated in the implementation of the i-community (Schwittay, 2008). After their training, they received money from HP, the NGO, and the AP government to set up and manage the CICs on a fee-based, forprofit basis. Several studies have documented the entrepreneurial spirit and creative skills shown by Internet kiosk operators as they strive for commercial sustainability (Rangaswamy, 2006), the challenges they face in combining social development and financial success (Kuriyan, Toyama, & Ray, 2006), and the changes that result from the interaction of (especially female) kiosk operators with state representatives and clients (Srinivasan, 2010). By contrast, the attention here is on how CIC operators helped to extend e-governance services to their rural clients. This is not to deny the operators' agency, but to show the effects of a particular corporate program.

As social entrepreneurs, the CIC operators provided important public services to Kuppam residents. Helping their customers access Yojanalu was paramount among them. The story of Chelliah is illustrative of the ways in which the operators participated in extending the benefits of Naidu's administration to its poor constituents (Rajalekshmi, 2007). We can think of Chelliah and others like him as "accidental citizens," who become incorporated into the state through their coincidental contacts with its agents, however remote from the political center. In fact, it is the compression of space resulting from ICT that allowed CIC operators to dispense government services. An e-governance portal that can be accessed from any computer (or increasingly, a mobile phone) with an Internet connection creates a multitude of contact points between governments and citizens, with the resulting potential for more inclusive governance, at least in theory.

As grounded studies of e-governance programs have shown, ICT use does not automatically or necessarily lead to electronic inclusion. Rather, such programs can reinforce existing inequalities by frequently relying on village elites for their implementation. This links back to transnational high-tech companies' mediated access to the poor and the perpetuation of the status quo through necessary collaborations with the politically powerful (Parthasarathy & Srinivasan, 2006). In addition, electronic government access can further marginalize groups such as women and untouchables, who might not be able to use computers in public spaces (Cecchini & Raina, 2004; Sreekumar, 2007).

It is here that local intermediaries, such as the CIC operators, with their awareness of local social dynamics and norms, have the potential to prevent or correct the discriminatory side effects of ICT. On the other hand, their agency is circumscribed by the conventions of their own class, caste, and gender status. Furthermore, as electronic entrepreneurs, they need to be concerned with the financial sustainability of their businesses, which can often be better ensured by fewer accidental and more reliable and affluent clients.

#### Village Photographers

One of the i-community's most high-profile projects was the village photographers: ambulant local women who were taking digital pictures, printing them on the spot, and then selling them for a small fee. For this, the women had been given a mobile photo studio—an HP digital camera and printer, as well as a small solar panel in a suitcase on wheels. HP had recruited the 10 women who participated in the pilot from a local self-help group. I sat in on one

of the first meetings of the group in early 2003, when the women were still trying to ascertain exactly how the project would work and benefit them. They had some tough questions for the newly hired local i-community manager, who did his best to convince the women that participating in the project was a worthwhile investment of their time.

A photographer was flown in from the United States to train the women. The project manager, who operated remotely from Oregon, recounted the women's first reaction to their instructor: "Oh no, it's a white guy who does not know anything about India, who does not speak the language, and who will probably get sick." The manager also told me how the women challenged the photographer on the price of the photos, knowing that what HP wanted them to charge would make them unaffordable for many potential customers. Eventually, the photographer informed them that HP would lower the price and "eat up the difference," which the manager characterized as a "revolutionary" move, showing HP's "humility" by listening to poor women in India. This exchange can also be understood as HP valorizing the local knowledge it set out to produce through the village photographer project, which served as an informal kind of market research, and thereby ensuring the success of the project for itself and its participants alike.

For HP, the aim of the project was twofold. The company wanted to improve participating women's lives by exploring the possibility of alternative sources of income being generated by somebody who had never taken a picture or run her own business before. With regard to corporate benefits, the project's designers and manager wanted to develop and field test a low-end, developing-market equivalent to the company's US\$30,000 professional photo studio outfit. The project also generated good PR and marketing material; a 10-second clip about the village photographers was included in HP's official 2003 branding campaign, hp+you. In addition, the project was to both unearth the uses BoP consumers might have for digital photography and raise awareness of HP's products and services among people with no prior knowledge of the company.

In keeping with the original objective of the icommunity to contribute to Naidu's e-governance efforts, the women had been envisioned by HP taking people's pictures for their ID cards, thereby saving them a trip to the photo studio in town (Dunn & Yamashita, 2003). According to the project manager, the resolution of the pictures was never high enough for such official purposes. Instead, he explained that the women took pictures of dead cows, when farmers had to show to their insurance company that the cow really had died, and that an autopsy had been performed. They also took pictures of people digging irrigation ditches and building bus shelters, providing proof of people's presence that would ensure the workers two bags of rice from the government. In this way, the project provided a form of visual administration of rural subjects.

The village photographers made their debut during the HP Solutions Week, when the most entrepreneurial of them earned a small fortune by taking pictures of Naidu with Kuppam residents (Dunn & Yamashita, 2003). In yet another instance of digital corporate citizenship, the project (and by extension, e-Inclusion and HP) thereby enabled a photographic account of the gift-bearing chief minister walking among his home constituents. The latter would remember the occasion by virtue of it having been captured by HP technology. Celebrating the village photographers' ingenuity, Fiorina called the women "Kuppam's first entrepreneurs" during her opening keynote of the 2004 Eradicating Poverty Through Profit conference (Fiorina, 2004).

In her usual hyperbole, she thereby linked them to a new group of development subjects: poor women who are trained to use ICT equipment, which they often purchase through microcredit loans and use to set up their own micro-enterprises. The originals of these electronic entrepreneurs are the Grameen phone ladies, who, for more than a decade, have been using their mobile phones to provide telecommunication access to fellow villagers for a small fee, thereby making a living for themselves and their families (Prahalad & Hammond, 2002). The parallels to microcredit, popularized by the Grameen Bank, are important. Katharine Rankin has argued that the microcredit model reflects a change from

"small farmer" beneficiaries with social rights to women clients with responsibilities to themselves and their families. [As a result,] the onus for development falls squarely on their shoulders, and their citizenship manifests not through entitlement but through the "free" exercise of individual choice. (2001, p. 29, original emphasis) Similarly, the village photographers were to take charge of improving their lives through their own initiative. Most took advantage of the opportunity, and eventually, the members of the original pilot expanded the group by training more women, even though HP had discontinued its formal support after the three-month pilot run.

This termination revealed internal company conflicts over the objective and direction of e-Inclusion. It was the result of a decision by the program's leadership to scale another e-Inclusion project that held more promise for commercialization. The village photographer project manager, who was also the last remaining member of the original e-Inclusion team, left the group as a result, citing the "disrespect" the termination showed in his mind for the women in Kuppam. He stayed at HP, however, and commented that one of the advantages of having "a normal job" again was that "I don't mess with anybody's life. . . . [I]f the women chose to be village photographers, then they chose that over getting a cow, which is a pretty big decision when you make \$1/day in India." For him, HP did not respect the gravity of such decisions and the impact its pilot projects had on participants' lives.

According to official company communication, by contrast, besides small amounts of additional income for the women, the project had generated other benefits as well: Some of the village photographers had become confident enough to approach the manager of a local co-op bank for a loan for their self-help group (Dunn & Yamashita, 2003). This loan would be used by individual members of the group to expand their entrepreneurial activities.

This emphasis on entrepreneurship accords with the values of self-reliance and initiative that are demanded of neoliberal citizens (Rose, 1999). These values infuse current development initiatives aimed at women and their corresponding organizational forms, such as self-help groups. In spite of their ubiquity in Indian villages—in AP, 70% of women belong to self-help groups (Arora, 2005)—self-help groups' contribution to overcoming women's marginalization remains contested. The poor women who organize in this way with other poor women are usually unable to address local power structures based on caste and class (Kumar, 2007). Transnational companies, on the other hand, have been eager to capitalize on the networks formed by selfhelp groups, sometimes using them as distribution and sales channels for their products (Prahalad, 2005).

In sum, e-Inclusion attempted to create new customers for HP through the fostering of electronic entrepreneurship. The i-community's projects wanted to make ICT central to the lives, and livelihoods, of individuals who had previously not heard of the company. In the case of the village photographers and CIC operators, new sources of income were built around HP technology. Supplying electronic entrepreneurs with their tools of trade therefore brought together the making of electronic entrepreneurs and technoconsumers. CIC operators and village photographers benefitted from these projects in a number of ways, enacting their agency which was, in part, enabled by training and material support from HP and Naidu's government.

# Conclusion

A primary objective of transnational high-tech companies' work at the digital corporate citizenship/BoP nexus is to increase consumption of ICT among the world's poor and the institutions serving them. One of the reasons Prahalad's ideas gained so much traction with corporate executives was the drop in individual and corporate consumption in the United States at the beginning of the 21st century. Prahalad promised companies entrepreneurial enough to follow his calls for profitable poverty alleviation vast new markets, incorporating billions of customers who previously had been thought of as outside the purview of mainstream corporations. This is one way in which incorporated citizens are constituted at the digital corporate citizenship/BoP nexus. This nexus marks a promising area for further BoP research because, even though e-Inclusion was discontinued after Fiorina was replaced by Mark Hurd as HP's CEO, other high-tech companies have developed similar programs that stand to benefit from e-Inclusion's lessons (Schwittay, 2009). A central issue is the difference between the "next billion" being cultivated as future high-tech consumers and the "bottom billion" in need of social development (Lavin, 2005, p. 15). The gap between the two must be acknowledged and bridged for meaningful change to occur at the BoP.

In a second reading of the title of this paper, neoliberal citizenship is increasingly realized through

consumption, which becomes a form of political engagement (Rose, 1999). Such engagement is thereby transformed from potentially contentious collective action into safe, satisfying individual acts that can be controlled by corporations and governments. This includes the consumption of government services by citizen-clients (ibid.). By expanding access to such services to incorporate previously excluded poor constituents, incorporated citizens are materialized through corporate support of e-governance programs. However, as shown by Naidu's political fate, processes of containment are not always successful, and democratic citizen action is not foreclosed. Relatedly, the constitution of neoliberal, entrepreneurial market participants at the BoP incorporates the poor into corporate and government spheres of action. Here, they are responsible for their own livelihoods, endowed with financial, technological, and knowledge tools to enterprise themselves out of poverty. There is a tension between the poor's supposed innate entrepreneurial activity and their continued cultivation by patronage-based governments, which constitutes another potential research avenue.

Last but not least, corporations are themselves incorporated citizens, whose digital corporate citizenship initiatives aim to turn their citizenship status into ultimately profitable partnerships with developing country governments and international development organizations. The digital corporate citizenship/BoP nexus provides a location point for these activities, whose potentials to improve the lives of the poor are simultaneously limited by the nexus's depoliticizing effects.

While e-governance programs promote technical, rather than democratic, government procedures, consumption rewrites political engagement under neoliberalism. Furthermore, the development apparatus of which transnational high-tech companies become a part through their poverty alleviation efforts cannot address the structural issues of global poverty. These limits are even more apparent when initiatives at the digital corporate citizenship/BoP nexus are compared to alternatives, such as redistributive justice movements or changes to gender and caste-based systems of social exclusion. On the other hand, ICTs can also "actualize social potentials" to which situated research into ICTD projects can be attentive (Mazzarella, 2010, p. 797). It is here where ICTD scholars could contribute to

future investigations of the possibilities of ICTs provided by transnational high-tech companies to bring about social and economic transformations that benefit the bottom billion, rather than the next billion. ■

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