

Research Article

Looking Beyond “Information Provision”: The Importance of Being a Kiosk Operator in the Sustainable Access in Rural India (SARI) Project, Tamil Nadu, India

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Abstract

Information and communication technology (ICT)-based development projects are based on the premise that ICTs can reduce acute information asymmetries by providing information, and that this reduction, in turn, leads to economic development. However, is it in their role as information providers that such projects shape the most change? Based on a study of the Sustainable Access in Rural India (SARI) project in Tamil Nadu, I argue that this ICT-based kiosk project shaped change less by the provision of information to an entire community than by the spaces for interaction that it opened up specifically for female kiosk operators. In their role as intermediaries between the state and citizens, operators in this project started to see the state differently and were, in turn, perceived differently by the village community.

Introduction

Access to telecommunication infrastructure has been an important goal for development agencies since the late 1970s. But it was in the 1990s that the objective of such access shifted to “information provision,” based on research that suggested a link among access to information, the reduction of information asymmetries, and economic development (Grace, Kenny, & Qiang, 2003; McConnell, 1995; Menou, 1993; Lamberton, 1973; Romer, 1986; Singh, 2002; Stiglitz, 1979, 2002).¹ Development agencies hoped the deployment of information and communication technologies (ICTs) in low-income regions would reduce information asymmetries, leading to the creation of a global and inclusive “information society” (Drori, 2007; infoDev, 2007; World Bank, 2003). Kiosk projects, which were established to provide shared access to ICTs in communities that otherwise lacked access to reliable communication infrastructure, were especially driven by this idea. Kiosks used ICTs to provide “information,” including market prices, weather details, and updates on government entitlement schemes (Gopakumar, 2006; IIITB, 2005; Keniston & Kumar, 2004; Kuriyan, Toyama, & Ray, 2006).²

At least three questions need to be asked of kiosk projects and their fundamental premise that the availability of ICTs and the achievement of

1. This was different than the 1970s and 1980s, when the focus was on “communication,” especially telephony (ITU, 1984; Hudson, 1997; Chakravartty, 2004).

2. The wide range of elements that constitutes “information” is important, but it is not addressed in this article.

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development goals are related. The first is whether or not information kiosks reduce information asymmetries or make information accessible to all sections of a population. So far, research on such projects suggests that access to information through kiosks is extremely uneven within a community for a variety of reasons (IIITB, 2005; Keniston & Kumar, 2004; Kumar & Best, 2006; Kuriyan, Ray, & Toyama, 2008; Srinivasan, 2004). The second question is whether or not access to information does, indeed, translate to social and economic changes in a community. Research suggests that the relationship between information access at kiosks and socioeconomic change is hardly universal, as it is mediated by a variety of historical, political, and cultural factors (Gopakumar, 2006; IIITB, 2005; Kuriyan, Ray, & Toyama, 2008). This article focuses on a third question, asking whether or not it is in their role as information providers that kiosks shape the most significant changes.

Research on kiosk projects has tended to focus on social and economic change along the objectives specified by projects themselves. Since these objectives are often focused on information provision, there is little research on kiosk projects that looks beyond their functioning as information providers. Moreover, project objectives are typically focused on end users, saying little about those involved in the establishment and everyday functioning of kiosks, including kiosk operators (KOs). Projects seldom mention operators except in an instrumental way—e.g., as information providers, as intermediaries between the state and citizens, or as mediating between an unfamiliar technology and a community.³ However, that is not all that KOs do. They do not passively “transmit” information; they understand and interpret it for themselves and for other users. Furthermore, they do not merely “mediate” between technology and user, or between state and citizen; they also consolidate their status in a community based on the position that they occupy as KOs. Since operators are the people involved most closely with a kiosk, changes in their lives can tell us a lot about the changes, intended or otherwise, that kiosk projects have been able to shape.

In this study, I look beyond the intended objectives of a kiosk project, focusing on the process of becoming and being a KO. I study the case of the Sustainable Access in Rural India (SARI) project. SARI was established in 2001 in the predominantly agricultural Melur *taluk* of Madurai district in Tamil Nadu, India.⁴ The project’s stated mission was the following:

To improve the quality of life among the rural poor by creating new opportunities in education, health, economic development and community through the appropriate use of ICTs (Aral, Escobari & Nishina, 2001).

Over the years, kiosks have been established in 50 villages of the *taluk* with the help of a local microcredit NGO called Dhan. Kiosks offer a variety of information provision services and are typically operated by women KOs. In the article, I focus on changes in these KOs’ lives.

The rest of the paper is organized as follows: I begin by laying out the idea that development projects can create spaces without intending to (Corbridge, Williams, Srivastava, & Véron, 2005). I subsequently use this idea to understand change in the SARI project. Next, I describe the history and working of the SARI project, especially its e-governance services. I then analyze how the project has shaped change in the lives of women KOs. Here, I focus on the increased interaction of KOs with representatives of the state, and also on their changed status in their communities and families. Finally, I present my conclusions, suggesting that, while kiosks have not brought about radical changes in the socioeconomic conditions of their users, they *have* shaped significant changes in the lives of KOs. Moreover, the limited social and economic changes brought about by the kiosks were shaped by repeated interaction among KOs, project employees, and state functionaries. Through regular training; brainstorming and evaluation sessions; and opportunities to interact with bureaucrats, agricultural scientists, lawyers, and health professionals, the SARI project provided women KOs a space to engage in activities that went beyond their traditional roles in

3. Even in the few instances where KOs have been studied by people external to the project, the focus has been to understand their role in the social or financial sustainability of kiosks (IIITB, 2005; Keniston & Kumar, 2004; Kuriyan, Toyama, & Ray, 2006).

4. A *taluk* is the smallest unit of revenue administration in a district. Melur *taluk* in Madurai district consists of 83 villages.

their community. I argue, thus, that it was not the information or the ICTs, but the *process* of becoming and being an operator that shaped change in the SARI project.

Development Projects and the Unintentional Creation of Spaces

Development studies literature has long argued that development projects seldom achieve the goals they set for themselves; in fact, they end up reinforcing existing power structures (Escobar, 1994; Ferguson, 1994; Li, 2007).⁵ Corbridge et al. (2005) understand the working of development projects differently. While they agree that development projects seldom reach their intended objectives, they suggest that such projects nevertheless create spaces for negotiation among marginalized sections of a population, even when they do not intend to do so.

I use Corbridge et al.'s framework to understand the SARI project. I ask what kinds of spaces the SARI project unintentionally created for the members of a community. My focus within the community is on women KOs, and I am particularly interested in the spaces offered by the process of state-citizen interactions that KOs are supposed to mediate. Here, I take seriously the suggestion offered by Corbridge et al. that people "see the state" or make sense of it through their encounters with representatives of the state. Development schemes that work on altering the frequency or nature of interaction between state agents and citizens have the potential to bring about a change in people's perceptions of the state and their ability to negotiate their relationship with it. While Corbridge et al. focus their analysis on state-sponsored schemes, I extend their argument in the context of development projects more broadly, using it to study the case of the NGO-run SARI project.

The idea of "seeing the state" has already been used in the context of kiosk-based e-governance projects to suggest that such projects change how citizens imagine the state, if not always in the direction the state desires (Kuriyan & Ray, 2009). While these authors focus on the end user-citizen's perception of the state, my concern is slightly different. I

focus on the mediated relationship between the state and a village resident in a kiosk project and ask two questions: How do KOs "see the state" following their work as mediators, and how do village residents, in turn, "see" KOs while they perform this role of mediation? I argue that more frequent interactions with local government representatives, bureaucrats, and a range of domain experts have helped KOs perceive and negotiate with the state differently. Interacting with village residents in their capacity as KOs, meanwhile, has altered village residents' perceptions of them.

Methods

My evidence is drawn from fieldwork conducted in two phases (April–June 2004 and March–April 2005) and follow-up conversations with project personnel in 2007 and 2009. Observing the project over several years helped me to better understand its working and evolution. It also helped me observe changes in the lives of KOs over time.

Fieldwork in Melur *taluk* included participant observation, interviews (mainly unstructured), and data collection from user logs maintained by kiosk operators and at government offices.⁶ Interviews with employees of Dhan and SARI provided an understanding of the history and current features of the project. In addition, people at the Melur *taluk* office (both users and employees), the sub-registrar's office, and the Melur municipality office provided details on the history and functioning of e-governance services.

Interactions with KOs helped me to understand the working of the project, especially the role of Dhan. Toward this end, I also attended KO meetings and group canvassing sessions (explained later in the report). I visited more than 10 Dhan kiosks and talked to 20 Dhan KOs during the course of fieldwork. The choice of three kiosks for detailed study emerged in part from these conversations. The study of individual kiosks included observing their functioning and collecting user data maintained by the kiosks. Talking to users and non-users in these villages, particularly women, was important in understanding the social context in which the kiosk was

5. These scholars differ in the intentionality that they attribute to the agencies deploying a project. Ferguson (1994) and Escobar (1994) see a hidden agenda behind the implementation of development projects. Li (2007) disagrees, arguing that development project personnel are mostly well intentioned, but that projects nevertheless end up strengthening dominant sections in trying to balance the interests of various participants in a project.

6. Most interviews were in Tamil, or in a combination of Tamil and English. Translations from Tamil are mine.

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located, as well people’s perception of the kiosk and the KO. Interacting with a KO’s family provided an understanding of the KO’s role and status in her family. Together, the conversations led to an understanding of the changes the KOs experienced in their everyday lives.

E-Governance Services in the SARI Project

When the SARI project was initiated in 2001, it was envisioned as a public-private partnership with funding from a private bank, technical support from a private rural Internet service provider (n-Logue), and Dhan as the local implementation agency.⁷ The district and local governments partnered with the project to offer e-governance services. The services mentioned on the SARI e-governance website at the start of the project included:

1. Provision of information regarding government schemes, including:
 - a) eligibility criteria and procedures for applying to Old Age Pension (OAP) schemes, women’s welfare schemes, loans from the District Industries Centre, and admission to courses in government colleges, as well as,
 - b) application forms for schemes. (These could be downloaded, filled in, and printed for submission. Some applications could also be e-mailed to the appropriate officer.)
2. Facility to apply for government certificates by e-mail. This involved the following government offices and certificates:
 - a) The *taluk* office for birth, death, income, community, nativity, and legal heirship certificates,⁸ as well as,
 - b) the sub-registrar’s office for guideline valuation of property, encumbrance certificates, and certified copies.
3. Facility to e-mail petitions and complaints to the chief minister, collector, and block development officer.

The e-governance services offered by SARI kiosks evolved in three phases between 2001 and 2004. A fundamental problem that the services encountered from the start was the resistance they faced from government officials at the village and *taluk* levels. Prior to e-mail applications and SARI, many of these officials were accustomed to being paid for facilitating these services.⁹ With SARI, they lost out on these payments. However, in the first year of SARI’s operations, the resistance from officials had only started to build. Moreover, government officials of high rank at the state, district, and *taluk* level enthusiastically supported SARI.¹⁰ A second phase of e-governance services began when the officials championing SARI moved in 2002–2003, and the services started to face more resistance.¹¹ Kiosks found it especially difficult to offer those certificates that involved a complicated process of verification of assets or identity, such as income or caste certificates.¹² In the case of pension applications, the

7. The SARI project group wanted to leverage Dhan’s knowledge of local needs in setting up kiosks. However, n-Logue and Dhan were unable to agree on a model of operation for the kiosks, with n-Logue favoring an entrepreneurial model, and Dhan a donor-funded model. As a result, n-Logue and Dhan set up two distinct brands of kiosks in the *taluk*. I focus on Dhan kiosks, partly because there were more Dhan kiosks than n-Logue kiosks (only about 10 by 2004).

8. The *tahsildar* (officer in charge of a *taluk*) agreed to accept applications for certificates by e-mail (i.e., without a signature and without the applicant visiting the office to submit the application). If a valid record existed for the person in question, an acknowledgment would be e-mailed to the kiosk specifying the day on which the certificate could be collected. The applicant could then visit the *taluk* office on that day, pay for the certificate, and collect it.

9. This especially included village administrative officers (VAOs), who were record keepers at the village level, and bureaucrats at the *taluk* office, who verified the registration of births and issued certificates. At the Melur office, where VAOs gathered every day, an officer candidly informed me that the “price” of certificates varied, depending on how urgently it was required and how many people asked for money along the way.

10. The collector even visited kiosks regularly and monitored the applications they sent. But the process of monitoring was never institutionalized.

11. Kumar contends that, by 2003, the demand for certificates from kiosks had dropped considerably, possibly due to delays introduced by VAOs and others who wished to sabotage the process (Kumar, 2004).

12. The income certificate has to be signed by the VAO and the revenue inspector.

inability to process an increased number of applications forwarded through the kiosk, along with the lukewarm response of government officials, led to a decline in the service. In consequence, the only certificates that were being applied for by 2004 were birth (and occasionally death) certificates.¹³ Meanwhile, e-governance services entered a third phase in the summer of 2004. At this time, government offices lost their Internet connections, because the state agency that had been paying for the connections discontinued the practice. Interestingly, birth certificates continued to be offered through kiosks, even though applications for certificates could no longer be accepted by e-mail at the *taluk* office. Instead, KOs undertook all the steps that a resident would earlier have had to go through when applying for and obtaining a certificate.

I return to the changing role of KOs as the nature of e-governance services evolved in the ways outlined above. But first, I describe Dhan kiosks and the role of KOs in operating them.

Dhan's Village Information Centers¹⁴

The SARI kiosks run by Dhan are called village information centers (VICs). They consist of a room equipped with a computer, peripherals, and Internet connectivity. VICs offer a variety of services, including e-governance (along the lines described above), computer classes, games, photography, video conferencing, and browsing, as well as online consultation with doctors, agricultural scientists, and veterinarians. They generate income by charging a user fee for accessing the services they offer.

Six years after the start of the project, no kiosk was able to meet all its costs with its revenues. Nevertheless, 50 VICs were in operation in the region,

and none had closed. This was possible because Dhan kiosks were not focused on breaking even, and were funded partially by Dhan.¹⁵ Every month, KOs handed over earnings from the VICs to Dhan, while Dhan paid the electricity bill, rent, Internet charges, and a monthly stipend to the operator.

Becoming and Being a Kiosk Operator

Since Dhan positioned the VICs as community assets, rather than as commercial enterprises, KOs were expected to work hard at both making their centers socially sustainable and encouraging all village residents to view the center as a place to find "information" relevant to their lives. KOs were thusly pivotal to Dhan's model.¹⁶ Since Dhan's programs typically focus on women and members of its self-help groups (SHGs) are women, Dhan's initial goal was to recruit only women KOs. But when the SARI project started, many families were not enthusiastic about this idea, because it would involve women travelling out of the villages where they lived—for a short-term KO training to begin with, and later, every day for work.¹⁷ As a result, not even half the operators were women at the start of the project. However, with time, more women joined as operators. In 2004, 19 of the 37 operational kiosks had women operators; by 2005, 29 of the 37 operators were women.

There were a variety of reasons why more women joined as operators with time. Dhan personnel made an aggressive effort to recruit more women by talking to their families. The presence of a few women operators also convinced other women and their families that being a KO was safe. In fact, women KOs acted as role models for other women. Additionally, the long drought that hit the

13. Birth certificates were much less in demand and less significant in village residents' (and consequently in the VAOs') lives. Birth certificates had only recently gained some importance because schools had become stricter about checking certificates prior to admitting students, and because Dhan had taken up providing birth certificates. Overall, birth certificates were less contentious than land-related records, caste documentation, or income certificates that were much more central to residents' lives—and to a VAO's earnings.

14. All material in the next few sections is based on IIITB (2005), ITfC (2008), Kumar (2004), Kumar and Best (2006), Parthasarathy and Srinivasan (2006), and Srinivasan (2004), unless otherwise stated.

15. The long-term plan was that, once a KO was able to meet all expenses at a VIC, she or he could run the kiosk independently.

16. A project executive with Dhan's ICT program spoke thus of a KO: "The key role here, the 'hero,' is the operator. Everything depends on the extent to which the operator approaches people, the levels to which they mingle with them."

17. KOs were seldom posted at kiosks in their own villages.

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Madurai belt between 2001 and 2004 meant that women did not have much work in their fields and had time on their hands. The drought also made the chance to earn an income seem more lucrative to the family, even if it involved women going “out” to work for salaried positions, which was uncommon in the region.¹⁸ In some cases, the woman operator’s stipend would even be the only steady income for a household, given the lack of agricultural income in that period. Meanwhile, the attrition among male operators was high, and they gave up their jobs as KOs to take other positions that paid better. For all these reasons, by 2004, the majority of Dhan-SARI KOs were women.

Other than its gender focus, Dhan did not look for specific traits in its operators. Most of its operators were former students from Dhan’s Computer Training Centre or VICs. Anyone who expressed an interest was taken on as an operator when possible, and was then provided training. Monthly meetings between KOs and Dhan employees were also used as ongoing training sessions on the technical and social dimensions of running an ICT-based kiosk. A project executive working with Dhan’s ICT program described these training sessions thusly:

When we began, we used to make one of them act as the villager and ask another operator to approach the villager and tell them about the services. They would initially be nervous, but gradually, things would be better. We would also train a new operator by making them act out how they would approach a potential customer.

About training KOs to reach out to more village residents, he said the following:

For the first few days, we go out canvassing door to door with the new operator. Next we ask the operator to speak at the village meetings. Then old operators are made to go with new operators and observe how they canvass.

KOs were also asked to set targets at these meetings. These targets were set in terms of numbers of users for each service, rather than in terms of income earned. Review meetings examined why KOs had been able or unable to meet past targets. Besides monthly meetings, operators who came to collect government documents at the *taluk*-level

government offices for their e-governance customers usually dropped in to meet people at the Dhan office. Overall, the links between KOs and Dhan were central to the functioning of VICs.

The KOs also knew each other well. They attended meetings together and chatted online with each other almost daily. New operators accompanied older ones to government offices to learn the procedures and recognize the people involved. Sometimes, KOs fetched updates on each other’s pending applications at the *taluk* office as a favor. Since operators were frequently transferred between kiosks, they shared their experiences about a specific village or region with the other KOs. KOs also interacted with each other at group canvassing sessions, where new recruits learned the art of canvassing in the village where they worked. In such sessions, operators split into smaller groups, going door-to-door to introduce the new KO to village residents and explain the services offered at the VIC.

Besides canvassing as a group, all operators were required to canvass for two hours in their own villages as part of their daily work schedule. As a result, KOs were well known in their villages. KOs also interacted with village residents because of their “IT groups” and “kiosk advisory committees” (KACs). IT groups consisted of five young people from a village who came from low-income families, had studied up to class 10, and were looking for work. Dhan provided free hardware and software training to this group, teaching group members to assemble computers, and in a few cases, to take over the operations of a kiosk. KACs comprised village *panchayat* leaders, village-level bureaucrats, and representatives from village associations. The goal of KACs was to establish the kiosk as a community asset, rather than as a solely commercial enterprise. KOs had to organize a KAC meeting every month with this objective in mind.

KOs interacted with government employees mainly to obtain documents such as birth or death certificates (the most favored e-governance service by 2004), and also while submitting documents such as ration card applications to the government. The nature of this interaction changed over time. Initially, KOs merely sent out e-mails to the *taluk* office and relayed e-mail responses from the office

18. Women who worked for a wage mainly worked in the fields of other village residents or those owned by residents of nearby villages.

to village residents: At this stage, their face-to-face interaction with these *taluk* officials was minimal. However, when it became clear that residents did not regard this as a service that saved them much time or effort (they still had to spend a day to collect the certificate from the *taluk* office), KOs offered to collect the certificate from the *taluk* office and deliver it to the applicant.¹⁹ At this stage, KOs started to interact with *taluk* officials at least once for every certificate they collected. Once the *taluk* office lost its Internet connection in 2004, KOs took to visiting the *taluk* office with an application signed by the applicant, checking if the name was registered and present in the computerized records, handing in the application, and returning in a few days to check if the certificate was ready. They sometimes had to make multiple visits before the certificate was ready. Once it was, the KO paid for and collected the certificate to deliver it to the applicant. KOs now had to interact multiple times with *taluk* officials on each application. Moreover, the terms of the interaction also shifted, as demands for bribes increased in this context. Since the person who had signed an application and the person collecting the certificate were different in this procedure, demands for bribes became more frequent on the pretext that rules were being bent to accommodate the KO.²⁰ Thus, KOs began to interact more frequently and on different terms with *taluk* officials over the course of the evolution of e-governance services.

Besides government officials, KOs also interacted with agricultural or veterinary scientists and lawyers when they organized consultations through teleconferencing at kiosks. They interacted with doctors and nurses as they organized patient appointments using e-mail, and also later, when they followed up to ascertain whether kiosk users kept these appointments. At times, KOs would accompany a group of patients to the hospital for treatment in the event

that the patients were unable to travel by themselves or had no one else to accompany them to the hospital.

While they saw the work of operators as critical, Dhan's goals were nevertheless concerned more with kiosk users. Research on the usage of kiosks and kiosk services in the Dhan-SARI case indicates that kiosks have been unable to attract a large number of people for a variety of reasons, including the location of kiosks; the affordability and relevance of services; and trust in older, familiar, and time-tested ways of accessing information and other services (Kumar, 2004; Kumar & Best, 2006; Srinivasan, 2004). The project has also been unsuccessful in drawing people from all sectors of a community, with caste and gender being particularly significant factors in deciding who used a kiosk and how. These studies suggest, overall, that while individual users might have benefitted to some extent from the services offered at the kiosk, particularly the service related to obtaining government certificates, the village community at large did not directly experience significant economic changes in their lives because of the kiosk. KOs, on the other hand, did experience significant changes in their everyday lives.

Changes in the Lives of Kiosk Operators

In this section, I examine changes in the lives of operators in the Dhan-SARI project. While the section continues to draw on my interviews with project personnel and a number of kiosk operators, the focus is on the operators of the three kiosks that I studied in particular detail. I call the operators of these kiosks Lakshmi, Chinnaatha, and Sangeetha.²¹ Lakshmi and Chinnaatha were in their 30s. They were both married and had children when I first met them in 2004. Both had been operators since the beginning of the project. Sangeetha was much

19. After some time, residents did not even have to go to the kiosk to apply for certificates; KOs collected the particulars that were required from an applicant's home, applied for the certificate at the office, collected the certificate, and delivered it to the applicant. A few operators went even further, visiting houses soon after the birth of a baby to convince the parents to apply for a birth certificate.

20. When the bribe amount was factored in, this service yielded no profit and resulted in a loss for a kiosk. The entrepreneur-run SARI kiosks discontinued the service soon after. The Dhan kiosks continued to offer these services, as a way to better increase awareness about birth certificates.

21. All of them belonged to "backward caste" (BC) communities. BC and scheduled caste communities inhabited different parts of a village in this region. These KOs lived in the BC parts of their villages, and their kiosks, too, were located in the BC parts of the village where they worked. All three KOs were from families that did not own much land.

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younger, single, and had been an operator for just over six months.

Lakshmi had wanted to study to be a teacher. When she got married upon completing Class 12, she had had to discontinue her studies and plans for work. Later, when Lakshmi wanted to learn to use a computer, she could not afford to pay for lessons. When an acquaintance in her village told her that members of Dhan’s Community Banking SHGs were eligible for free computer training from Dhan, Lakshmi formed a group with 10 women and undertook the computer training. One of the first to take this computer training course, Lakshmi was posted as KO at one of the newly established VICs. Over time, she earned a reputation as an excellent KO, one who was able to both reach out to the community and generate the income expected of her kiosk. She was frequently moved to different locations to improve the fortunes of a new kiosk or a kiosk that was not performing well. By the summer of 2005, Lakshmi had already worked in six villages and was on her seventh posting.

Chinnaatha, too, had married young, and she had been married for 11 years when I first met her in 2004. Unlike Lakshmi, she had spent some time as an SHG member before she found out about Dhan’s computer training program. Following the training, she first worked as a KO in the village where she had grown up. A few months later, she asked to be posted to her husband’s village (where I met her). To keep her home and work schedules manageable, Chinnaatha worked out an arrangement whereby her two children stayed with her mother during the week, and with her during weekends.

Sangeetha became a KO after her involvement with a Dhan IT group. She heard about the group from her mother, who was a member of a Dhan SHG. Sangeetha had finished high school and was sitting idle at home when she heard about the group. Since the training was free, her parents allowed her to enroll for classes. Soon after, a kiosk was set up in her village, and Sangeetha’s group operated it. When the KO of a kiosk in a neighbor-

ing village left, Sangeetha moved to take over his position and operate a kiosk by herself.

Thus, Lakshmi, Chinnaatha, and Sangeetha each followed a different trajectory to become a KO and in their work as KOs. What was common to all three women was that being an operator was their first experience with either paid work or working outside the home.²² All of them discussed the profound impacts of this work on their lives within and outside their family and homes. Changes along two dimensions appeared to be particularly significant in their descriptions: first, in their awareness of techniques and procedures in a variety of domains of activity, including government administration, agriculture, health, law, and Dhan’s work, and in their interactions with people involved in these diverse domains; and second, in their status within the village community and their families.

A. Awareness and Increased Interactions

Earlier, I couldn’t talk to strangers. Now I talk to people at the *taluk* office and my seniors at Dhan. I meet great doctors. I can teach a class of students and I know that I can do it well. I am in touch with so many fields: agriculture, veterinary, government. There’s nowhere else that I could have learned so much. I am much more confident of myself today; I am bolder than I was. I used to feel really bad that I was not studying further, but now I feel good that I can earn, I can work.

A young KO who had just graduated from high school and could not afford to attend college said this to me in June 2004. Similar words from many other operators indicated how working as KOs had introduced them to domains and techniques that they had not been familiar with beforehand. KOs saw this as a profound and positive change. Lakshmi, for example, said that she had not ventured out much before or after marriage, and that she did not “know anything about the outside world.”

She added, “Now I have learned so much, I go to the *taluk* office, the Collectorate. I have developed many new habits. I have learned organization and management.”²³

22. Lakshmi and Chinnaatha had worked on their own land, but never on land owned by others or for a wage. Sangeetha had just completed school and had not worked as much in the fields.

23. Lakshmi also observed that she was painfully shy prior to her work as a KO. However, after two years working as a KO in one village, she said that had changed, and that she had also succeeded in bringing about changes in the village. For examples, consider the following comments: “Women would never be sent outdoors. It was very difficult to

To what did KOs attribute these changes? All the KOs I spoke with, including Lakshmi, Chinnaatha, and Sangeetha, emphasized the role of training sessions with the Dhan project staff and fellow KOs, as well as the opportunities they had to observe Dhan personnel and other experienced KOs at work. While training and meetings are an important part of many of Dhan's programs, Chinnaatha observed that her experience with the SHG was different from the one with the ICT program, because the SHG had only had their meetings monthly, while the KOs had meetings and discussions all the time for the kiosk project. This, Chinnaatha said, she found very useful. Such sessions and meetings provided fora for interaction that were especially critical for women operators, many of whom (especially the older KOs) were interacting for the first time with a group of people who were not family and did not live in their village. KOs also actively supported each other outside of meetings and training sessions. For example, when Sangeetha's kiosk experienced low usage, a group canvassing session was organized to attract more users to the kiosk. When Chinnaatha experienced problems with her printer, a visiting KO offered some suggestions on how to fix the problem.

Observing operators in action supported Lakshmi's statement about having "learned so much," especially about government procedures and interactions with bureaucrats and elected leaders. To obtain a birth certificate prior to the loss of Internet connectivity at the *taluk* office, for example, operators would e-mail a computer clerk at the *taluk* office on behalf of a customer. The KO would be informed by e-mail once the certificate was ready, and she would then travel to the *taluk* office to collect it. This process involved an awareness of government procedures, as well as face-to-face interactions with government employees. In addition, KOs traveled by bus to the *taluk* office by themselves, with members of their IT group, or with fellow KOs. This was especially significant for women KOs like Lakshmi and Chinnaatha, who had not undertaken these interactions or journeys alone

(where they undertook them at all) prior to their employment as KOs.²⁴ Chinnaatha, who had never applied for or collected certificates prior to being a KO, had collected a remarkable 140 certificates in her 18 months as KO in one village.

It is important to note here that "information" about government procedures is only one part of what KOs gained through their work. It was repeated visits to the *taluk* office and interactions with the functionaries that helped KOs to learn the ropes of obtaining a certificate. KOs came to understand who it was they should meet, the best times to approach a functionary, how to ask for a favor such as a quick turn-around, how much to bribe, and when not to bribe. That KOs had completely grasped the workings of the *taluk* office became clear when the Internet connection there was discontinued in mid-2004. KOs continued to deliver government certificates to their customers as though nothing had changed. However, they now had to make one trip to the office to place an order, several to inquire if the certificate was ready, and another to pick up the certificate. They also dealt with more demands for bribes, since KOs were now being accused of acting on behalf of village residents without the stamp of approval that "e"-governance had enjoyed. A young KO described her efforts to deal with a bribe request in this period:

They [*taluk* officials] start talking rules. They say only the parents can collect this [the certificate] legally. We explained that . . . we are doing this as a service [i.e., not for personal benefit]. The officials say, "That's why we are giving the certificates to you, even though it is not legal. But give us an amount for each certificate that you take." We told them at that time that we didn't know all this and had no money. We had five new applications the next time. But they [officers] remembered us and insisted that the parents come. Because we haven't gone their way, they are beginning to insist on that [rule] now. I talked to the clerk and explained that we had told the parents that we would get the certificate. The parents had therefore gone to work thinking we

bring them to the kiosk for lessons. That changed to an extent by the time I left," or "People also didn't know how to get birth certificates. We 'brainwashed' the people. One birth certificate application required us to talk to a family at least 10 times . . . We had to take the service to their doorstep before they would use it."

24. *Traveling alone was not a new experience for Sangeetha, but even she had never collected certificates from the taluk office before her work as a KO.*

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would deliver their certificates. He [the officer] said that was not his problem, and only the applicant could receive the certificate.

These words provide an indication of the different ways in which a KO tried to convince the *taluk* official to release the certificate she wanted. Lakshmi confessed that she had had to pay a bribe once, but that mostly “we give only if we want to” when asked for five or 10 rupees by a clerk in the *taluk* office. She further said,

To the extent possible, we try to solve this ourselves. If they [*taluk* officials] call us [to the office] many times, we go every time . . . I also have a[n IT] group, so going there multiple times is not a problem.

Thus, KOs did not follow a uniform method to deal with requests for bribes, or even have a single stand on the issue.²⁵ As I showed above, in some cases, KOs tried to circumvent or refuse requests for bribes, but in others, they dealt with the situation by paying the bribe. Regardless of how KOs sorted out bribe requests, the fact that they dealt with an altered state of affairs and were still able to deliver certificates (albeit with some delay) was a sign that they had learned to negotiate with government functionaries.

Dhan was also working on increasing the interaction among KOs, village-level bureaucrats, and local elected officials. To this end, the *panchayat* president and the VAO (arguably the most important state agents at the village level) were invited to be a part of the village Kiosk Advisory Committee (KAC). The KAC was supposed to meet regularly to discuss the activities of the kiosk and obtain feedback from all its members. A forum like the KAC gave women operators more opportunities to interact with their local president and VAO than they would normally have, given that, in the three cases of my focus, the

presidents and VAOs were all male. Chinnaatha, for example, complained often that she hardly got to meet the president of her village, and that he did not involve himself in the affairs of the kiosk. By making him a part of the KAC, she hoped that he would set aside time each month for talking about the problems faced by the kiosk. Further, where she would have had to go to meet him personally earlier, with the KAC, she could meet him at a public forum. The president and VAO also started to recognize the KO because of frequent interactions in the process of establishing a KAC and deciding a date for a KAC meeting.²⁶

To be able to explain them to village residents, KOs had to stay abreast of ongoing and new government schemes. Dhan pointed these out at meetings, but operators also explored schemes on their own.²⁷ In the summer of 2004, for instance, Chinnaatha discovered details of the government’s ration card scheme while browsing online. She went on to discuss the scheme with other operators. She also assisted village residents in applying for the scheme, selling them printouts of the application form, and taking their picture.²⁸

Overall, then, the Dhan-SARI project exposed operators to a wide variety of techniques, skills, procedures, and resources. It also created or increased interaction among the KOs, between KOs and Dhan project staff, between KOs and bureaucrats, and between KOs and the village community. By affecting the frequency and nature of encounters between KOs and state agents at different levels of the hierarchy, the SARI project shaped how KOs “see the state.” Building on Corbridge et al. and using the examples outlined so far, I suggest that these encounters allowed KOs to learn how best to negotiate with the state to achieve their users’ (and their own) ends.²⁹

My focus thus far has been on the unintended

25. Dhan personnel did not wish to antagonize the *taluk* officials with whom they interacted by complaining to higher levels of the bureaucracy.

26. In Lakshmi’s village, too, the KAC was envisioned as a way to make the president a part of the effort and bring him into the loop.

27. In this way, Dhan’s ICT project was possibly more amenable to innovation than its other programs. Comparing her time with the Dhan SHG and being a KO, Lakshmi said: “You get more skills here, and there is more scope to do things for people.”

28. She also assisted them by filling out their forms for free.

29. To the extent that KOs were mediators between the state and citizens, an important question is whether KOs themselves start to act as brokers, based on the resources, skills, and connections they have gained through their work as KOs. Indeed, a project executive with Dhan suggested this possibility, adding that the only way to counter such a development was to provide the “right” training to KOs. However, I saw few signs of this happening in the context of

changes brought about by encounters between KOs and the state, especially in the ways that KOs perceived the state. However, KOs also experienced changes in how the community perceived them and in their relationships within the community and their families. These changes, too, were not intended by the SARI project and I examine them next.

B. Status in Community/Family

Being a KO significantly changed a woman's status in her village community. The village community typically came to know the KO by name. In fact, kiosks are more closely identified with their KOs than with Dhan. People who needed a birth certificate urgently sought out KOs and handed in details. To be recognized in this way within the village community was important to the operators I spoke with. They were proud of being referred to as the "girl/woman to go to for certificates" or the "girl/woman with the computer." The symbolic value of the computer cannot be underestimated; it played an important role in how a KO was regarded. It was also one of the factors that set the KO's job apart from other jobs she might have chosen.³⁰ As an operator, a KO handled a device that few in the village knew how to operate. Further, this was a device to which much aspiration was attached within the village.³¹ Finally, the fact that a village had many SHG members (and many people engaged in other professions), but only one KO, also made the KO stand out. As a consequence, women operators gradually began to be seen as role models in their villages.

Where convincing women to be KOs, or even to attend computer classes, was an uphill task when the project started, families gradually started to feel that the aspiration to be a KO was both safe and feasible for the women in their families. In talking about her own work as a KO, Lakshmi emphasized that the continued presence of kiosks and women KOs was responsible for this change in mindset, and that it had helped to attract more female students to the kiosk, some of whom might later continue as

KOs. Being a KO had thus changed the way an individual was viewed by her community, and this seemed to be an especially significant shift for women KOs. KOs had already expanded what young women in a village saw as their options and opportunities; but potentially, they could continue to leverage the status and credibility accorded to them to bring about other shifts in norms.

Women operators talked about changes in their relationships within their family. Not all changes made them feel better off than before, but they admitted that the changes were considerable. There was an economic dimension to this change. Women operators had an income, and this was the first time that the three KOs I interviewed were engaged in work that paid them a monthly salary. The ways in which women KOs used their salaries were different for different operators. Both married operators talked about the opportunities their income made available to their children. They talked about sending their children to private, English language-medium schools. The income also proved critical in meeting household expenses in the conditions of drought that were prevalent for the first three years of the SARI project. While both KOs said their husbands and the joint families they lived with appreciated the extra money, their stories of other kinds of family support differed considerably.

Sangeetha, who was single, had a different story to tell than Lakshmi and Chinnaatha, who were married and lived in their husbands' villages, close to their husbands' extended families. Sangeetha said she received complete support from her parents in her work, even though they remained anxious about her movements outside her village. Lakshmi and Chinnaatha had very different accounts. Lakshmi said her husband and parents-in-law were initially unhappy with her working, but were now proud of her. Her husband, a carpenter who worked from home, helped her with housework. Lakshmi continued to do most of the housework, albeit on a

birth certificates. This could be because KOs did not have a monopoly on birth certificates. Also, birth certificates were, in any case, not perceived to be crucial by most residents. But, KOs were increasingly also involved in collecting details about the village population to create a "village profile" that the panchayat and local institutions were starting to make use of. KOs could thus potentially become powerful in this role in the long term if these details were used in deciding beneficiaries for government schemes. Still, this was not visible in the period of my field research.

30. This was equally true of the taluk office, where the computer operator was accorded a particular status because he operated the computer that nobody else in the office could.

31. Lakshmi, Chinnaatha, and Sangeetha all mentioned their desire to learn computers. Lakshmi also wanted her children to learn to operate a computer.

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schedule that accommodated her work at the kiosk. She was unsure how long she could continue with her work as a KO, since her parents-in-law were getting old and required more assistance in their everyday routines. Interestingly, while Lakshmi liked her kiosk work, she saw her husband as the primary breadwinner for the family, and she appeared somewhat uneasy that her husband did not earn enough to provide his family a comfortable lifestyle with his earnings alone.

While Lakshmi struggled with these contradictory emotions, Chinnaatha had her own set of contradictions to deal with. She confessed that she received no support from her husband and his family. Chinnaatha's own mother, who lived in a neighboring village, supported her by taking care of her children during the week. Chinnaatha wryly remarked that everybody liked the money she brought in, but resented the time she spent away from home and housework. She, herself, felt bad about the time she spent away from her children. Chinnaatha struggled constantly to balance the amount of time she spent at home and at work. She also tried, unsuccessfully, to engage her husband in the work she did. Chinnaatha said that she often despaired of carrying on in this way. However, she also said (almost in the same breath) that she liked what she was doing and appreciated the support from the Dhan office that kept her going.

Thus, being a KO brought about significant changes in the lives that women KOs led in their communities and families. Women KOs have been able to use the economic and social resources available to them in their role as KOs in the renegotiation of their everyday lives in small ways. Of note here is the role played by Dhan in these changes. While earning an income was important in the changes described above, it was clear that the support from Dhan strongly shaped the way in which women experienced being a KO. Their ability to contest their family norms, for example, drew largely from their belief that the Dhan project staff was behind them. They also drew strength from their interactions with other women KOs who faced similar circumstances. Thus, Dhan's interaction- and training-centric model was crucial to both the way women KOs experienced the SARI project, and how they drew on this experience in their lives outside the kiosk.

A common theme that emerges from the examples of change presented so far is the importance of

the unintended changes that a project of this kind makes possible. The Dhan-SARI project was started with the goal of information provision and in the hope that access to information would bring about economic prosperity for kiosk users in the village community. While the kiosks' information services do not appear to have made drastic differences in the economic prosperity of their users, Dhan KOs have benefited in unanticipated ways from the project. Further, these benefits do not all derive directly from access to information, nor are they solely economic. Rather, they are linked to the opportunities made available by being associated closely with a project of this kind, in particular, through the creation or modification of spaces for interaction.

Conclusion

Based on my study of the SARI kiosk project operated by Dhan, I have argued that, while these kiosks did not bring about radical changes in the socioeconomic conditions of their users, they nevertheless shaped significant changes in the lives of KOs. Further, the changes brought about by the kiosks were less about a “reduction of information asymmetries,” and more about gathering the resources required to negotiate social asymmetries. I have suggested that the changing frequency and nature of interactions with government entities and luminaries in other domains helped KOs garner such resources. Association with the project provided KOs with new forums in which to conduct these interactions (online consultation, face-to-face meetings with bureaucrats to fetch certificates for customers, KACs, kiosk events, etc.) and new resources (familiarity with terms, procedures, and techniques, as well as social and political connections, etc.) that they were able to leverage, even outside their role as KOs. Overall, the project changed both how a KO “sees the state,” and how the community “sees” the KO.

Finally, I use these examples to advance the argument that, if development projects do not achieve the objectives that they lay out, neither do they always end up reinforcing existing power structures. Whatever the objectives of a development project, it is important to study its working on the ground to understand the unanticipated ways in which different sections of a community utilize opportunities offered by the project. ■

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