

## GYANDOOT PROJECT: ICT INITIATIVE IN THE DISTRICT OF DHAR, MADHYA PRADESH\*

### I. Abstract

*Gyandoot*, which means “Purveyor of Knowledge” in Hindi, is a government-to-citizen, intranet-based service portal, implemented in the Dhar district of the state of Madhya Pradesh, India, in January 2000. The project was designed to extend the benefits of information technology to people in rural areas by directly linking the government and villagers through information kiosks. The kiosks provide access to a variety of government services, such as registration of complaints and submission of applications for the issuance of certificates and loans. Data on prices of agricultural crops in different markets are also available.

Under the project, 38 kiosks have been established, with each kiosk covering approximately 38 villages in its vicinity. This has facilitated easy access to government services, for which the villagers previously had to travel to the district headquarters situated miles away. Nearly 6,000 complaints were filed in the first year, highlighting inefficiency in the workings of various departments of the district administration. Such complaints are to be resolved within a stipulated period of seven days. This ease of complaint has forced some level of accountability in the functioning of government officials. In addition, access to market prices empowers the farmers in negotiating with buyers.

Gyandoot pioneered the idea of rural telecenters in India. The project concept has been replicated by other information and communication technologies (ICT) development initiatives in India. Gyandoot was considered to be very successful in the early years of its implementation, and the project was awarded the Stockholm Challenge IT Award in 2000 for public service and democracy. However, subsequent evaluations have reported diminishing levels of activity, placing in question on the long-term viability of the project.

### II. Background

Gyandoot is a government-to-citizen intranet-based service portal, implemented in the Dhar district<sup>1</sup> of the state of Madhya Pradesh. The state has a population of 1.7 million, with 60 percent living below the poverty line and 54 percent belonging to the category of “scheduled tribes.”<sup>2</sup> The goal of the Gyandoot project was to establish community-owned, technologically innovative, and sustainable information kiosks in this poverty-stricken, tribal-dominated rural area of Madhya Pradesh. Rajesh Rajoura, Collector (head

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<sup>1</sup> A district is home to nearly 40 offices of various development and regulatory departments. The district collector is the head of its administration.

<sup>2</sup> Scheduled tribes are the poorest and the most underprivileged people in the community.

of the administration) of Dhar, and Amit Aggarwal, CEO of the district *panchayat* (local government), conceptualized the project in November 1999.

Gyandoot was launched on January 1, 2000, with the establishment of a low-cost intranet connecting a server at the district headquarters with 20 government-owned information kiosks in five blocks of the district. Subsequently, 17 privately owned kiosks were added.

Each information kiosk or *soochanalaya* consists of a computer, a modem, a printer, an uninterruptible power supply (UPS) system which includes a backup battery in case of a loss of electricity, furniture, and stationery. These kiosks are located in government buildings or at prominent locations, such as markets, or along the main roads. The central hub is located in the district administrative headquarters at the collectorate. The information on the portal is in the local language, Hindi. Each kiosk provides services to 10 to 15 *gram panchayats* (village councils) covering 20 to 30 villages and a population of 20,000 to 30,000 people. The kiosks enable villagers to apply for different government services and file complaints online by sending e-mails in Hindi to the district headquarters. E-mails received by the official at the district headquarters (complaints and applications) are forwarded “by hand” to the concerned departments. These transactions are handled manually because most of the departments that need to act on the applications and complaints have not been computerized.

Some of the services offered include information on agricultural crop prices, online registration of applications for obtaining copies of land records, an online public grievance system, and a village auction site. Application processing for driving licenses and access to the secondary and higher secondary board examination results were added after one year of project implementation. Privately owned kiosks have added services such as telephone booths, photocopying, horoscope services, and computer training

The owner of the kiosk, known as a *soochak*, is selected from three nominees proposed by the local community. The district council provides training to these nominees. At the end of the training, the best trainee is chosen as the soochak. Soochaks are mostly young and educated, and they work more as entrepreneurs than employees. Soochaks are not entitled to receive any salary and are expected to bear the costs of stationery and telephones. Their income comes from a fee of Rs 10–15 charged for different types of services provided to the citizens at the kiosks. Ten percent of the income from the kiosk is to be paid to the district councils. A license fee of Rs 5,000 per year is paid by the soochaks of the privately owned kiosks. The district council pays the license fee of the government-owned kiosks.

A nonprofit institution has been set up to manage the project. The National Informatics Center provides technical support and guidance in system maintenance and software development.<sup>3</sup> The funds for the Gyandoot network have come from several sources. The kiosks have been set up through private funding, supplemented with loans provided by public institutions. The networking infrastructure was built entirely by government funds. Private foundations have now come forward to fund expansion of the network.

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<sup>3</sup> The National Informatics Center is a department of the federal government with units at the state and district levels. It develops and implements IT solutions for different departments of the government. URL: <<http://home.nic.in>>.

### **III. Impact/Results**

The project has established itself in more than 600 villages, covering 9 out of 13 development blocks in the district of Dhar. Moderate activity levels were reported in the very first year of the project operation. For example, more than 6,000 e-mail complaints pertaining to income and caste certificates, pending pension amounts, and drinking water shortages were lodged through these kiosks. Villagers who used the Gyandoot kiosks saved time and the cost of travel to the district headquarters to obtain documents and services from the government. To file complaints or submit an application, villagers might have to spend Rs 25–35 (nearly one day's wages) to go to district headquarters (which could be up to 100 miles away), and would also suffer a loss of wages or other earnings for the day. Often, a single trip may not be sufficient to get the task done.

In an evaluation of the Gyandoot project, 50 percent of the users interviewed perceived that, through Gyandoot, there was less harassment from government officials. The villagers had quicker access to government officials than before, their requests were given due priority, follow-up work on pending issues was initialized quickly, and there was a feeling among users that the corruption level had gone down.<sup>4</sup>

Gyandoot worked as a catalyst for improving computer awareness in rural areas of the district. Private computer training institutions were set up in the region. About 120 rural youth were trained in soochanalayas. Computer clubs were established in various high schools, and students were taken for study tours to the nearest soochanalayas.

Impressed by the early success of Gyandoot, a member of parliament has allocated Rs 2,500,000 to develop a new model of e-education by setting up information kiosks in 30 schools. After recognizing the increased awareness about computers and IT in the district, the Indira Gandhi National Open University (IGNOU) has opened a study center for undergraduate and postgraduate courses on computer applications in its distance education program. The government of Madhya Pradesh has instituted an annual Gyandoot cash award of Rs 200,000 (US\$ 4,320) for the project that best takes IT to the state's poor.

### **IV. Key Elements of Empowerment**

#### ***Information***

The Gyandoot project has been instrumental in providing timely and easy information access to villagers living in many remote and isolated rural areas of the district of Dhar. Updated information regarding the public food distribution system (availability of subsidized food grains to poor families), lists of families below the poverty line, beneficiaries of social security pensions, beneficiaries of rural development schemes, information regarding government grants given to village committees, and other subjects

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<sup>4</sup> Center for e-Governance, IIM (Indian Institute of Management), Ahmedabad. In an evaluation study conducted in April 2002, 32 users were interviewed.

of interest to villagers is available on the intranet. Information on crop prices has enabled farmers to obtain better deals for their produce.

**Box 1: Information on Crop Prices Get Farmers a Better Deal**

The local traders of the Bagadi village quoted a price of Rs 300 a quintal (a hundredweight or 100 kilograms) to farmers for their potato crop. Through the kiosk, the farmers could find out the price in a particular market that was 100 miles away was Rs 400 a quintal. The farmers sold the crop in that distant market and earned an additional profit of Rs 100 a quintal. In another case, farmers had taken their produce 40 miles to Mumbai, in order to take advantage of prices for garlic and wheat that were 40 percent higher.

***Inclusion/Participation***

The design phase of the project involved active participation of the district residents. Project meetings were held with the villagers to gather their input. Among the concerns highlighted at the meetings was the absence of information about prevailing auction center prices for agricultural products. The selection of services offered on the portal was a result of this interactive exercise.

Although no formal and systematic mechanisms for user feedback were incorporated in the design of the Gyandoot service, kiosk owners and a few aware users often voiced to the authorities user demand for more services. Subsequently, a few more services were introduced through Gyandoot, such as driving licenses, e-education, and the ordering of organic manure. There also have been demands to increase the types of complaints covered in the complaint module by including those about all government departments.<sup>5</sup>

***Accountability***

The availability of certain kinds of information in the public domain, such as lists of families below the poverty line who can avail themselves of subsidized inputs from government, brings about greater accountability. Citizens can raise objections about the inclusion or exclusion of names. Complaints against poor services are expected to be addressed within a period of 7–10 days. If the grievances are not responded to within this time limit, the collector can summon the officials concerned for an explanation. This has enforced some level of accountability for public officials. Several anecdotes have been documented in which villagers were able to file a complaint against an inefficient delivery of service and get a quick redress of the complaint.

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<sup>5</sup> Under the present grievance redress system, complaints can be made on: drinking water, scholarship sanctions or disbursements, the quality of seed or fertilizer, employee establishment matters, queries, the functioning of schools, the public distribution system, beneficiary-oriented schemes, or the functioning of village committees. See the 2002 evaluation study conducted by Anwar Jafri, Amitabh Dongre, V.N. Tripathi, Aparajita Aggarwal, and Shashi Shrivastava of the Overseas Development Institute, London.

### Box 2: The Redress System Online

- In Premnagar, Dhar, Rami Bai, a destitute 87-year-old widow and two neighbors had not received their monthly pension of Rs 150 for four months. After they sent a complaint through a kiosk, a team of officials showed up at the village the next day to resolve the matter. The officials discovered that 47 other villagers shared the same plight.
- A complaint costing Rs 10 brought drinking water to a tribal hamlet of 39 households. The villagers' previous complaint to local authorities had not yielded results for six months. To the surprise of the villagers, their complaint filed through the kiosk brought a handpump mechanic to the hamlet within two days, and he repaired the handpump within three hours. Now, the person who fixes the handpump is more responsive, because of the fear that a complaint may be made directly to the collector.

## V. Issues and Lessons

### *Challenges*

Although a rural telecenter project such as Gyandoot has the potential to significantly empower the rural population, the actual impact has been somewhat limited for several reasons discussed below.

The kiosks have been made economically nonviable, because infrastructure bottlenecks, such as slow and unreliable dial-up connectivity and an irregular power supply (a six-hour power cut is a regular occurrence), have forced additional investments in power backup. Often, the availability of electrical power determines the times during which the soochanalaya can be opened.

The number of users has diminished significantly in the third year of the project. The initial team of district officers who conceived the idea and implemented it enthusiastically was transferred out. Subsequently, various departments in the district headquarters slowly reverted to their unresponsive attitude to citizens' requests for services and complaints. A recent evaluation study reported that the grievance redress system, which was very popular initially, leaves 90 percent of the users dissatisfied in terms of response time as well as corrective action.<sup>6</sup>

The dwindling turnout of users has prompted the privately owned kiosk owners to offer additional services such as computer training, photocopying, and public telephones to make up for the loss of revenue. To the extent that these owners focus on more lucrative services, they do not pay as much attention to villagers who seek the traditional Gyandoot services.

Awareness levels about the Gyandoot system remain relatively low among the villagers, especially among poor and illiterate laborers, in spite of significant media attention and

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<sup>6</sup> Evaluation study conducted by the Center for e-Governance, IIM Ahmedabad.

publicity. An evaluation study indicated that (1) nearly 60 percent of nonusers did not use Gyandoot, because they felt that there was no need to do so; (2) 35 percent were not aware of what Gyandoot had to offer; and (3) 3 percent had heard negative reports about it.<sup>7</sup>

### ***Key Factors for Success***

Perhaps it is early to judge the viability of the Gyandoot system, since ramping up usage in rural areas takes time. An important lesson learned is that building awareness and improving the usage patterns of ICT applications in rural areas may take much more time than anticipated by a project team. This holds true especially when the value proposition for the citizen is weak, as in the case of Gyandoot, in which only one part of the entire process (filing an application) has been improved.

To become more responsive, the departments at the district level (responsible for the processing of complaints and application forms) need to be computerized and significantly reengineered in terms of having a built-in software application that processes and monitors the progress of applications or complaints received. The roles and responsibilities of government officers need to be clearly demarcated. In each department, IT enthusiasts could be identified who could be responsible for a complete end-to-end delivery of a service to the citizen.

There is a high level of gender inequality in the usage pattern of the information kiosks. Out of 40 users interviewed in a survey, only 3 were women.<sup>8</sup> The low number of women users can be attributed to the social structure of Dhar, which confines women to their homes and does not encourage their participation in business or public affairs. The inclusion of services that benefit women users, such as information on health care and childcare, could have encouraged more women to avail themselves of Gyandoot services. This disparity points to the need to include gender concerns during the design phase of the project.

The few experiments that were designed to bring women into the kiosks need to be replicated more often. For example, a competition to select the healthiest child was conducted online. On the day of the competition, mothers brought their children of one to three years of age to the kiosks and provided all the pertinent data online to the district headquarters. Selection of the healthiest child was made on the basis of the data received from all the kiosks, and the results were announced through the intranet.<sup>9</sup>

Given the weak demand for existing services, a new service is needed with broad and strong appeal that could attract a large number of farmers to the kiosks, such as the issuance of certificates of land title to farmers, as was done in Bhoomi in Karnataka. Merely receiving an application for the issue of land title (leaving the rest of the process

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<sup>7</sup> Jafri and others (2002).

<sup>8</sup> Jafri and others (2002).

<sup>9</sup> Prakash Naveen, "Evaluating the Impacts of the Gyandoot Project," *Regional Development Dialog*, Volume 24, Autumn 2002 (United Nations Center for Regional Development).

manual and corruption-prone as is done in Gyandoot currently) does not offer adequate value to farmers.

### ***Outlook***

Even at locations where Gyandoot kiosks are functioning well with motivated soochaks, empowerment outcomes have been limited to the *individual* level. Farmers have gained better bargains from buyers and have been able to redress complaints and expand their opportunities through government programs. However, improved communication with the government has not brought communities together to participate in the development process.

One reason for this is that the promoters have seen the information kiosks only as a mechanism for delivering services efficiently. Increasing the participation of the community in the political or development process was not seen as one of the objectives.

Empowerment should become the focus of the next stage in the evolution of the project. After fixing the problems of infrastructure at kiosks and automation of departments at the district level to ensure quicker service delivery, the scope of the program can be widened to publish data on development plans and their implementation. Partnerships can be built with grassroots organizations to encourage feedback on development plans and systems. Also, linkages can be built with programs of decentralization, such as community-sponsored rural schools in which the process of community participation can be facilitated through Gyandoot kiosks.

## **VI. Further Information: References and World Wide Web Resources**

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