Forum

Give For-profit Rural Business Centers a Chance to Diversify Into Service-led Employment and Village BPOs

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There are few examples of village kiosks or telecenters working well in terms of financial self-sufficiency and economic impact on citizens in rural areas in South Asia. Reaching these twin goals of commercial profitability and economic empowerment is complex in rural settings. Here, it costs more to extend access to public infrastructure (roads, telecom, and power) and to social services (health, education, and government services) for low-density population distributed over sometimes difficult terrain than it does for high-density urban area dwellers. Lower income levels also mean service providers must accept lower average revenue per user.

With few exceptions, the vast majority of pilot rural telecenters financed in the 1990s by bilateral and multilateral donor agencies have not proven sustainable without long-term outside funding (Fillip & Foote, 2007). Despite the Tunis 2005 Commitment (WSIS, 2005) to bridge the digital divide, and despite all the good intentions of international organizations to overcome the digital divide and eliminate such traditional development problems as illiteracy and social inequalities, throughout the Africa and South Asia regions, most telecenters have been relegated to the "dustbin of history," to borrow from Leon Trotsky.

Competing models of telecenters, rural access points, and/or kiosks are already employed in India in states with quite distinct political economies, namely Kerala, Andhra Pradesh, Haryana, and Karnataka, among others. Recent studies have looked closely at the kiosks currently functioning in the former two states (Kuriyan, Ray & Toyama, 2008; Kuriyan & Ray, 2007). The rural business kiosk project, known as *Nemmadi* in Karnataka, is worth highlighting for two reasons: (1) it is providing financially viable rural kiosks that are realizing "development" benefits in terms of delivering government-to-citizen services (G2C) and business-to-citizen services (B2C); and (2) *Nemmadi* is increasing employability prospects through education and rural Business Process Outsourcing (BPO) services. It is too early for a comprehensive impact analysis of the *Nemmadi* model, which was introduced in 2004, yet early indications are that this public-private partnership may distinguish itself in bringing network infrastructure, services, and job opportunities to "the bottom of the pyramid."

The Karnataka government facilitates the *Nemmadi* project as part of a build-own-operate (BOO) model. *Nemmadi,* meaning "peace of mind" in Kannada language, was coined by the Government of Karnataka. The role of the public sector is limited to providing data and strictly enforcing a competitively bid, consortium-based service level agreement (SLA) that has been established between the state government and the three Indian private sector companies: Comat Technologies, 3i Infotech, and n-Logue

Communication Ltd. The SLA specifies daily hours of operation, maximum wait time for services, and other metrics.

The business model for *Nemmadi* is based on a combination of support for a quantitative scaling up of the number of people reached through telecenters, a functional scale-up to increase the scope of activities, and an organizational scale-up to improve the organization's effectiveness and efficiency of its core activities (Fillip & Foote, 2007). One of the lessons of *Nemmadi* is that a focus on any one area of support to the exclusion of the others is not sustainable. A company or consortium that has strong values (e.g., to provide universal access or e-literacy and e-governance services for people in rural areas), but is badly run, without proper attention to translating values into profits, will plainly not do well. A combination of a firm commitment to providing multiservices and strong commercial competence offers a good chance of success.

Offering multiple services allows capital and operating expenses to be amortized and spread across different services. The Rural Business Centres (RBCs) are basically a network that delivers G2C services during the day, B2B and B2C services after-hours in education, and BPO services. This is the functional scaling-up. Comat is now also providing convenience services such as travel ticket booking, prepaid mobile phone top-up, and utility bill payments.

The G2C services include accessing the Record of Rights, Tenancy, and Crop Inspection (a land record, referred to as the RTC) data online and printing it out, accessing food coupons, issuing caste and income certificates, and updating crop data and utility payments. Fees are derived from a complex revenue model in which government has fixed different charges for different services, and these vary depending on the geographical location, season, service, and extent of access to the back office databases. Issuing the RTC electronically has eliminated the village accountant who created, modified, and supervised handwritten manual records and the associated bribes.

What makes *Nemmadi* different from most models that currently exist is that its services are based on transactions/per use, which allows Comat to build a business based on volume rather than the high up-front costs that other models have difficulties supporting. To illustrate: 20 million land records divided by 167 *taluka* offices results in 120,000 records per office. Priced at Rs. 15 (US$0.37) per RTC certificate, this averages to Rs. 1,800,000 (US$44,830) per office in revenues. This is sufficient, over time, to cover operating costs, provide a modest return to state revenues, ensure good service levels, and result in a profit-making proposition for Comat. For other private services, such as ticketing services and topping up pre-paid mobile phones, the revenue model includes origination fees and transaction costs.

From a few experimental pilots, the project is increasing the number of kiosks and numbers of people reached through the RBCs. As a measure of the success of the *Nemmadi* model, Comat, in collaboration with other state governments, is rolling out another 5,000 RBCs in 2008 that will serve a population of approximately one million people.

A key question is where to go from here? There have not yet been any reliable studies on how much the RBCs have actually improved the economic livelihood of the communities in which they lie. Certainly, they have spread awareness about the use of IT and the Internet, and Comat has already created nearly 1,600 jobs in the RBC workforce, with skills and competencies attractive not only to the employees but to the IT-enabled service industry as well. Especially noteworthy is that approximately 400 of these employees are women emerging from a rural pattern in which even educated women from rural backgrounds don't find employment opportunities, unless they travel to cities. From a citizen's viewpoint, the opportunity cost of at least a day's labor and productivity is saved by coming to the RBC for services instead of going to the nearest *taluka* office.

Business Process Outsourcing Services

The educated manpower available in Indian villages and small towns is an untapped and under-utilized resource (World Bank, 2006). Rural BPO offers benefits to employers in terms of reduced labor costs vis-à-vis urban areas; rural employees are difficult to poach. Employees also benefit from non-seasonal employment. A shift could take place from the current paucity of "good jobs" which dampens the demand for education among poor parents.

Possibly, more service opportunities will help curb migration trends of youth and unemployed skilled workers to urban areas.

The BPO initiative in Karnataka by Comat is shared with other companies in India, such as Datamation Consultants, Lason India, and Satyam Computer, that have headed toward rural areas, in part, to maintain their productivity. These firms have started operations in smaller towns and villages, outsourcing low-skilled work such as data entry, digitization, and scanning and formatting of documents. Datamation is a leader in India using IT-enabled services to extend job opportunities to women from socially and economically disadvantaged backgrounds (Sharma, 2005).

Comat's rural BPO initiative is aimed at complementing the success of its urban and semi-urban centers that cater to overseas clients. It offers cost-cutting alternatives to urban clients and new sources of income and employment to the villagers by leveraging Internet technology. Comat has more than 40 centers across Karnataka state delivering "check-processing services" for a leading developer of recognition solutions for the U.S. check-processing market. Increasingly, the data entry and processing work done in towns can be broken up into smaller components and outsourced to appropriate rural kiosks and skill centers. These jobs are being done by high school students and dropouts in villages.

Plans are underway to provide medical transcription services from the RBCs. Over time, new opportunities are emerging with delivery of credit and transaction services through the kiosks, as well as education programs.

Tapping Talent: Village-based Training for the Next Generation

Could the RBCs serve as platforms for digital literacy such as office applications, introduction to the Internet, and skill-based training? A business model can be built around delivering such services. The training could be for government officials, students, and the rural youth who are increasingly disinterested in smallholder farming and are seeking employment. Courses could be bundled along with other employability courses for retail, insurance, banking, and self-employment. At least two hours per day could be dedicated for such training in the RBCs, 300 days a year. Assuming training could take place in 750 kiosks, with a students-to-computer ratio of 4-to-1, at least 90,000 participants could be trained each year.

The key challenges to providing high quality digital literacy and other training services for rural youth are low educational levels/poor learning outcomes, scattered populations, low effective demand (from both the self-employed and employers), lack of local language content and interface, and the need to address pricing for, at least, cost-recovery.

Employment Exchanges

There is a need to match requirements with supply of suitable profiles. In this context, it is interesting to consider whether the RBCs could become a platform for an "Electronic Employment Exchange" to bring interested rural youth and employers from the public and private sector together at one place. The RBC would provide assistance to match job requirements and personal profiles. Currently, there are several existing vacancies in government departments in the state for which many candidate applications are received. However, due to the mismatch of required skills and supplied quality, available positions often remain unfilled for long periods. The flip side is that potentially good candidates in rural areas miss out on these income- and career-building opportunities due to a lack of access to information and a lack of required skills, despite having required educational qualifications.

Linking the Disabled to Employment Possibilities

Marginalized and disabled persons were given preference in the selection processes. Comat has employed around 100 disabled persons so far as kiosk operators. Such vocational training and employment is a start to creating job opportunities for the local population.

On the basis of the implementation thus far, future research must address, for instance:

What would be the monetization model for each additional service added to the rural kiosks? Presently, the business model is based on the concept that infrastructure is common across services. The key to success is thus the efficient usage of each element of infrastructure. Further research questions

would address the question of what, in fact, the most appropriate services mix is. Which services are more popular than others? How do local needs and demographics become integrated into a roll-out plan in terms of what price points are preferred by customers? At what point will the cost of operations rise faster than revenue?

To what extent are private services viewed as a public good? The *Nemmadi* business model places almost total risk on Comat. But implementation is a state-wide public project, and exogenous factors such as change of government, change of officials, changes to policy, and changes to the implementation plan occur. The research questions would address how public-private-partnership/build-operate-transfer models can adequately consider these risks, and whether there are examples of rewards provided to the private entity for taking these risks, as well as penalties for the government agency for not mitigating these risks? What new models have merit in rural e-governance that place profit limits on the private entity (regulated business/utility business model), that specify reverse SLA on the government to mitigate some of the private sector risks, that have a third-party management, and that include a government contribution/escrow to increase government's stake in the project? ■

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