Rural PC-Kiosks: Who Benefits and How?

Deepak Menon, Karishma Kiri and Kentaro Toyama

"What the poor need is economic opportunity, improved nutrition and health care, healthy environments, education, and other components of a rewarding and sustainable livelihood. To the extent that ICTs can help achieve those other goals, they are a worthwhile tool of development efforts, but they remain tools, not goals".

Kerry S. McNamara

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Introduction

One of the UN Millenium Development Goals is to "develop a global partnership for development" and a target defined for this goal is "to co-operate with the private sector and make available the benefits of new technologies, especially information and communication technologies". The Digital Opportunity Task Force, created by the G8 heads of state in July 2000 examines ways in which the most marginalized communities can be benefited by information and communication technologies (ICT). Developing countries are witnessing a proliferation of ICT projects -36% of these are in Asia, followed by 29% in Africa. 60% of the Asian initiatives are in India, with about 10,000 rural PC kiosks.[1]

Several studies have been conducted to assess the socio-economic impact of these initiatives and, particularly in the case of entrepreneur-run PC kiosks, the dissonance between their dual goals of financial sustainability while catering to social development needs has been highlighted.[2] (K. Keniston, 2002) Issues revolve not so much around the costs of offered services, but more so around the utility and relevance of the service and the profile of the average user. Some of the questions that emerge are: From the point of view of the entrepreneur who is trying to build a sustainable business around a kiosk, what are the services which she or he would focus on driving? Do these services genuinely have an impact on the quality of life of the most marginalized members of the community in the village? Taking a step backward, which of these services are even perceived by marginalized groups as being useful?

Background

The kiosks which have been surveyed as part of this study are for-profit and essentially consist of one or more PCs, a printer, a digital or web camera and Internet connectivity.

These kiosks are part of a network of kiosks being set up by some rural informatics companies in India. The companies conduct needs assessment studies to select a district & within that district, specific villages where kiosks can be set up. The project is presented to the community and individuals interested in running the kiosk as a business venture undergo a selection process, following which one person in a village becomes the owner of the kiosk. Capital costs are provided through bank loans, again facilitated by the concerned rural informatics company. The company also provides content, services, training for the kiosk owner and in several cases, connectivity as well. Once this has been put in place, the kiosk owner becomes wholly responsible for generating revenue to cover both the operating expenses and loan repayment, which is done in monthly installments. The kiosks aim to provide access to information, educational and opportunity and livelihood improvement options. Services offered at the kiosks include:

- Computer education
- Other education: Spoken English, adult literacy, school subject tutorials
- General internet access: Browsing, email, chat, telephony
- Specific Internet-based services: Astrology, matrimonial, job searches
- Photography, simple desktop publishing, games, insurance sales, photocopying services
- E-Government, agriculture, healthcare and veterinary services

The kiosk provides an individual in a village with the opportunity to set up a sustainable business with a fairly low level of capital investment while providing the community with access to resources which otherwise are not easily available. The first question which this paper addresses is: To what extent have the kiosk owners been able to achieve this? To understand this, we have looked at the financial performance and service expansion of kiosks over time. The second question: Who are the people who benefit from these services? Here, we have looked at user demographics and tracked whether there have been any shifts in the primary user demographic profile over time, the idea being to understand both the scope and depth of outreach of the kiosk.[3] (F. J. Proenza, 2001)

We have thus attempted to trace the evolution of a rural PC kiosk, both in terms of it being a business venture as well as an avenue for social development.

Methodology

300 rural-PC kiosks have been tracked over a time period of 18 months (November 2004 – April 2006). The kiosks are spread across 13 districts, over North, South and East India.
48% of the sample are located in villages with population less than 6000 and all are within 5 to15 kilometers of a town. Kiosks were chosen randomly, with no bias either towards those which were generating profits or towards those which were not. Data collection was done by applying a semi-structured questionnaire, every quarter, to 300 kiosk owners and 5 randomly selected customers at each kiosk – around 7000 customers have been interviewed. Customer interviews were conducted at different times during the day to increase the probability of getting respondents with different occupational backgrounds and of different age groups. Only customers above the age of 12 have been interviewed. A bias brought into the study was to avoid interviewing more than one student at any single kiosk – this was done to partially neutralize the fact that most of the regular users were students. In the absence of this bias, usage patterns of people with other occupational backgrounds, such as farmers would not have been explored. Interviews with the kiosk owner covered themes such as revenue and expenses, customer traffic and service / technology usage patterns, attitude towards the business and future plans and business and technology issues and needs while customer interviews focused on demographics, kiosk visiting habits, service usage patterns and opinions about kiosk and services.

Findings

Emerging business model

Over the time period of the study, 35% of the sample have had to be eliminated from the survey and replaced with other kiosks to maintain the overall sample size. The basic criterion for a kiosk to be included in the sample has been Internet connectivity and maintaining linkages with the rural informatics companies involved for services and content. The dropouts are primarily kiosks who chose to disconnect the service, usually claiming inadequate income to pay the required access fee, which works out to an average of around Rs. 1000 per

month. However, most of these kiosks continue to operate, offering non-Internet based services such as data entry, simple desktop publishing, games and computer education.

82 % of the sample report profits, most of them less than Rs. 2000 per month. Of the kiosks that have remained in the sample for the entire time period of the study, 66% report an increase in income over the time period of the study, with the remaining showing either a decrease or no change. The group that shows an increase in income however also shows reasonably high profitability, with 60% reporting profits ranging from Rs. 2000 to Rs. 4000 per month. Revenue flow, however, appears to be irregular, with April to July being the time period during which revenues are maximum.

Computer education, games, browsing/email, digital photography and simple desktop publishing appear to be the most profitable services and, therefore, the services that the kiosk owners are driving the most. 79% of the sample have invested in additional hardware- primarily CD writers, photocopiers and scanners, with a smaller subgroup (26%) having invested in additional computers. 61% of the sample report inclination to add computers.

The kiosk, therefore, appears to be financially viable, but at a fairly slow pace, with stagnation setting in at profit levels around Rs. 2000. The kiosk owners are willing to invest in equipment, aimed at:

- Services such as games, browsing, and computer education: These would still primarily target existing regular users, getting them to spend more time at the kiosk, but essentially using the same set of services.
- Photocopying, data entry, photography, etc: These would target a different set of users – owners of small businesses, the village Panchayat office, etc., for whom the kiosk would essentially provide business center services which would otherwise be available only in nearby towns. For example, digital photography is emerging as a high-potential service, with most government schemes, school / college admissions, examination hall tickets, etc. requiring photographs of the applicant.

Also, most kiosk owners believe that they can earn more if given better Internet connectivity as well as technical and marketing support and more locally relevant content & services. Given this emerging business focus, the question is: Who are the target segment?

Customer profile

The kiosk is most used by students, people with private jobs, educated unemployed youth and farmers. 75% of the users are male and this has remained so over the time period of the study. Interestingly, a small shift towards users reporting high monthly household incomes is seen- the number of customers with incomes less than Rs. 2000 has reduced by about 5 to 10% while the number with incomes over Rs. 8000 has increased by about 10%. The shift seems to be primarily caused by more high-income students and people with private jobs using the kiosk. Most regular users visit the kiosk frequently – weekly, on alternate days and even daily.

Browsing / email, games and computer education remain highly used, while e-Government, agriculture / veterinary services and healthcare contribute to less than 10% of service usage. In fact farmers, though showing fairly high usage of e-Government services, specifically land record access, show much higher and regular usage of photography, desktop publishing and games.

Usage of development services is relatively high at kiosks where these are offered consistently and regularly, indicating that there is a market, if the service is adequately provided & demand is driven to some extent by the kiosk owner. High usage of healthcare, in particular, is seen among housewives. Also, high usage of healthcare and adult literacy is seen among unskilled laborers, most of whom have a monthly household income of less than Rs. 1000 per month. And, while customers largely perceive the services to be inexpensive, customer suggestions for additional services include requests for more e-Government and agricultural services, along with enhanced computer education.

Increase in usage of services such as photography, simple desktop publishing , photocopying and viewing examination results online as well as a customized application to create resumes, combined with the large number of kiosk owners who have invested in scanners, CD writers and photocopiers again indicate the push towards providing services for regular user groups who also are fairly affluent and well-educated as opposed to expanding the existing market for development services among the more poor and marginalized.

Conclusion

The rural PC- kiosk, as a business, shows sustainability, although at a slow pace and with the kiosk owner having to take on the financial burden of additional investment in equipment.

However, the current pattern of usage and profile of user indicates that, though the kiosk definitely provides cost-effective and useful services, the skew appears to be largely towards the more affluent and educated section of the community and in fact, further, does not seem to have a favorable gender bias[4] (Kerry S. McNamara, 2003) as well, with men being the predominant users. This is despite the definite existence of a market for relevant development-oriented services among the more marginalized. It would be, therefore, of considerable socio-economic value not only to look at ways of enabling the kiosk owner to generate greater revenue through development-oriented services but also to study alternate mechanisms of service delivery – for example, how best technology could be leveraged to enhance existing mechanisms such as schools, primary health centers.

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