LOCAL ENTREPRENEURSHIP FOR BRIDGING THE DIGITAL DIVIDE -
A CASE STUDY OF AKSHAYA PROJECT IN KERALA, INDIA

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ABSTRACT

Akshaya, an innovative project implemented in the State of Kerala, India aimed at bridging the digital divide, addresses the issues of ICT access, basic skill sets and availability of relevant content. Quality ICT dissemination and service delivery facilities (‘Akshaya Centres’) are set up within a maximum of 2 kilometers for any household and networked leveraging entrepreneurship. E-literacy training is given to at least one member in each family enabling the entrepreneurs to build a bridge with the local population. Development of relevant digital content in local languages has also been taken up in the project through private participation.

BACKGROUND

Kerala is the southern most state of India and has a population of over 32 million. Nearly three quarters of the population live in rural area. A strong local self-government framework ensuring democracy at the grassroots level is well in place with 992 Grama Panchayats and 58 Municipal Councils and Corporations representing the rural and urban areas respectively. Kerala is also known as “God’s own country” for its natural beauty, which makes it one of the top tourist destinations of the world. Kerala has a literacy level of 90.92% (2001 census). Kerala has made impressive achievements in social development and poverty reduction over the last quarter century that has resulted in the state having indices of social development at par with even developed economies. However sustaining the social economy especially in the context of increased longevity and high levels of basic literacy and education requires major strides in economic development. Compounding these challenges is the new knowledge and information revolution. It is now believed that to maintain a competitive edge and prosper in this new era, the state must effectively leverage the knowledge revolution, and make productive use of knowledge in its agricultural, industrial and service sectors.

The World Bank's annual development report, Knowledge for Development (1998) stressed the importance of leveraging new media technologies like the Internet in developing countries for areas like lifelong learning, training and retention of skilled workers, transparency of government and financial institutions, and rural as well as distance education. There is the concern that developing countries will be "left behind" if they don't participate in the global information society. Another report of the World Bank stated, "If countries cannot take advantage of the information revolution and surf this great wave of technological change, they may be crushed by it". The digital divide is soon becoming the most visible component of the development divide. For developing countries, digital divide unless tackled have several potentially harmful consequences, including further marginalisation (increased gender, rural-urban and poor-rich gaps). This is because access to opportunities for wealth creation is reduced or polarised and potential losses of considerable development opportunities as productivity and efficiency gains are not transmitted from rich to poor countries.

It is realized that a conscious strategy to leverage ICT and make a substantial attempt to leap frog in to the future is essential as far as Kerala is concerned. The project Akshaya is an initiative by Department of Information Technology...
Technology, Government of Kerala, for bridging the digital divide in the State.

**Digital Divide**

The statistics pertaining to digital divide at a global level, present an alarming picture. Only 6% of the world's entire population today is Internet users. Of these 429 million, 88% are in industrialized countries. Africa, Asia and the Middle East together account for only 1% of the users. US and Canada together account for 57% of the internet users. The richest 20% account for 94% of the world's Internet users, while the poorest 20% account for 0.2%. These disparities are not simply of developing world – developed world divides, nor is any country completely unprepared to use technology. E-readiness assessments depict a far more complicated picture, where all countries have some pieces in places, and others are lacking.

Only 0.6% of the Indian population is online, as against 54% in the US or 6% in the world. Even within this minuscule population of Internet users in the country, the divide is sharp. The state capitals alone account for 79% of Internet connections in the country. The penetration of IT to the rural India is still a dream.

**Efforts in Bridging the Digital Divide**

Thousands of small initiatives are underway to address the digital divide, both ‘on the ground’ and at policy levels. Several ventures have been initiated in the past in India also to bridge the digital divide. These ventures have enjoyed varying degrees of success. However, these initiatives were fragmented and discrete. The general perception now is that the divide has multiple dimensions and challenges. To make sufficient impact, a holistic attempt needs to be made.

**Lessons Learnt**

The lessons learnt from project reviews of efforts across the world indicate that there are three major concerns when it comes to addressing the issue of digital divide. These are whether access to ICT can be ensured, whether people have the skill sets to use ICT and whether meaningful uses of the technology in the day today life can be ensured. Most initiatives have focused on providing access and presume that the market would make available services through the ICT medium for the use of common man. However this is a highly unrealistic assumption. A determined effort needs to be made if services relevant to common man are to be made available through the ICT medium.

**AKSHAYA PROJECT**

‘Akshaya’ is an initiative of Department of Information Technology, Government of Kerala, India to bridge the digital divide in the state and is expected to transform the lives of 6.4 million families in Kerala by bringing home the benefits of Information Technology to the common man. The important premises on which Akshaya was structured are:

1. Sustainable ICT access points are to be structured and established in the first phase.
2. A meaningful intervention by which ordinary people are provided basic IT Skill sets that would enable them to operate IT equipments without fear and inhibitions needs to be attempted.
3. A repository of relevant content in the local language covering every walk of day today life of the common citizen needs to be compiled and made available.

The following are the major objectives of Akshaya:

- To develop networked ICT access points (Akshaya centres) within 2Kms radius of every household serving an average of 1000 families(Target – 9000 Centres)
- To develop minimum ICT skill sets (e-Literacy) to at least one person in every family ( Target - 6.4 million families)
- To develop large number of contents relevant in the day-to-day life of the local population

**The approach**

While the above broad premises were by and large accepted, it was felt that the most critical
component is the setting up of access centres. Even though there is a large number of ICT access centres and cyber cafes, they generally show an urban skewness in location. In the rural areas and geographical locations that are considered to be economically unviable conventionally such access centres are set up as community initiatives. A community-supported centre may be in a position to have a trouble free setup initially but sustenance over a period of time becomes a real concern. It was felt that the access centres should be privately owned as they are better managed when the owners have a stake in them. The entrepreneurial instinct is a strong force in making an access centre effective and ensure its sustainability.

However to ensure that ICT access centres are setup as entrepreneurial ventures, the key element is to identify adequate number of confident and competent entrepreneurs. Also a simple business model that is more likely to be successful than complicated ones needs to be formulated with the entrepreneur having the flexibility to improve the business model. Thus the challenge was essentially to formulate a simple and appealing business model, which can be made more attractive by the entrepreneur.

It was in this context that the issue of imparting skill sets was factored in as a key element of the Akshaya project. The project had a component of providing basic skill sets in IT to common citizens. It was proposed that each Akshaya centre may have a defined coverage area of around 1000 families and one person from each family may be imparted with the proposed training programme. This would ensure two aspects. One, every family would get linked to the Akshaya centre during this phase. Two, there would be an assured revenue stream accruing to the entrepreneur as part of this training initiative. The programme got a major boost when the local self-government institutions decided to endorse this literacy campaign and earmark a budgetary support of Rs. 120 per person trained which is payable to the entrepreneur as the training fee. A major element that would decide the success of this initiative was the response of the people to such a training intervention. For this at the grassroots level a major campaign was structured and led by the entrepreneur concerned as well as the local self-government institutions. This resulted in a tremendous awareness among the local population on the need and the prospects of learning and using IT.

Malappuram, the Pilot District for Akshaya

The project has a pilot phase covering the district of Malappuram. The district has an area of 3550 sq. kms and a population of 3,629,640. Literacy as per 2001 census is 88.61%. Apart from the District Panchayath, there are 14 Block Panchayaths, 100 Panchayaths and 5 Municipalities in the District. The Urban population is less than 10%. The number of households in the district are 0.63 million.

The IT penetration in the district is very minimal. Only 2860 houses have computers whereas 0.17 million houses have telephones. Out of 410 computer institutes in the district only 176 of them have internet connections. But, the survey shows that there are 48723 computer-educated persons in the district.

The Panchayathi Raj Institutions in Malappuram have the proven record of successful implementation of many innovative developmental and social projects. Malappuram also have the distinction of having maximum entrepreneurial persons.

Selection of entrepreneurs

One of the first steps of the project implementation was a detailed location survey done in Malappuram district through which 801 possible locations for setting up Akshaya centres were identified ensuring the spatial spread covering the entire district. These locations were vetted scrutinized by the local bodies and 626 locations were finally selected. The selected locations were notified and applications invited from entrepreneurs. The applicant entrepreneurs were told about the concept of the project and also briefed about the minimal assured revenue as part of the e-literacy campaign. The question posed to the entrepreneur was fairly simple. Given the fact that one third of the initial capital expenditure can be recouped in three months and in the process, one member from every family in the service area gets formally attached to the
centre for training, is the entrepreneur confident of leveraging the above advantages for sustaining operations. It was also pointed out that being a large scale intervention, economies of scale would be possible for reducing capital expenditure if proper systems of aggregating the demand are planned. The government also offered to facilitate sourcing bank finance to fund capital expenditure. Over 1000 initial applicants closely weighed the above parameters and around 800 of them came forward to take the next step. These 800 persons were interviewed to assess mainly their entrepreneurship. In the first level 420 persons were selected from the 800 applicants against the same number of Akshaya centre locations. Block level workshops were conducted explaining the entrepreneurs the potential of starting Akshaya centres to create confidence to the selected entrepreneurs and to attract more entrepreneurs to start Akshaya centres at the balance locations. Subsequently 152 entrepreneurs more were selected and Memorandum of Understanding (MOU) were signed between the Local Panchayaths/Municipalities and all the 572 selected entrepreneurs. The MOU was mainly for ensuring running of the centres at least for 3 years at the selected locations.

Entrepreneurship Orientation Programmes

2 day long entrepreneurship orientation programmes were conducted block-wise to all the selected entrepreneurs. The focus of the programme was the sustainability issues of the centres. Entrepreneurs were encouraged to come out with their own business models based on the local situations. Many innovative ideas were emerged during the programme and by the end of the 2-day programme none of the entrepreneurs were having doubt on the sustainability part. Care was taken during the programme to offer only very limited support from government in terms of financial help. But government machinery was in the forefront in facilitating the entrepreneurs in setting up the centres by way of giving priority in power connections, telephone and internet connections, issuing building licenses etc.

Entrepreneur Driven Campaigns

Out of 572 entrepreneurs signed MOU, 552 entrepreneurs have now set up Akshaya centres. The centres are given a fixed catchment taking ample care that every house in the district fall in the catchment of any of the Akshaya centres. Thus, each centre covers 1000 – 1500 families. All the centres have 5 to 10 computers, printers, webcam, internet etc. and minimum 3 numbers of trained professionals.

Unlike the similar government programmes, the grass root level campaigns are lead by the entrepreneurs in the area allotted them. Since the revenue to the centre is directly related to the performance in attracting more and more people to the centre, each centre is coming out with unique innovations in campaign. Apart from the compulsory house visits they were supposed to undertake along with the elected local body members, unique campaign modes like ‘Vilambara jadha’, ‘Akshaya santhya’, ‘Akshaya assembly’, ‘Akshaya grama sabha’ etc. were organized by the entrepreneurs. Government also facilitated by organizing street plays, postures, banners, brochures etc.

Unique Business Models

The initial phase of e-literacy training assures the entrepreneurs more than 50% of the cost they incurred for setting up the centre. For recurring the balance investment and to meet the recurring and operational cost a standard business model was given to each entrepreneur comprising Training, IT enabled tuitions, ITeS, data entry and DTP works, email, VoIP, Internet browsing, application forms and government information, classified advertisements, e-commerce, government payments, information on economic sectors, education, career development, data collection, data compilation, surveys, market surveys, health mapping, HR mapping etc. But apart from the usual application of IT at the centre, they are coming out with many local specific models like Akshaya note books, Akshaya cakes etc. This is giving tremendous confidence to government that the choice of using entrepreneurship as the driving force for the success of the project is getting more and more justified. In any other mode one would not have seen ICT centres working from 7 AM to 11 PM every day in remotest rural area of the state.
Government to Continue Facilitation

By seeing the success of the project, government is now thinking of declaring Akshaya centres as the front end mechanism for all government related service delivery to citizens. Unlike normal course, where first e-governance activities are completed and then think of front end service delivery mechanism, here the reverse is happening. After seeing a successful model in front end delivery, the e-governance activities are accelerated which will help the citizen as well as the entrepreneurs. Government is also coming out with Akshaya entrepreneur support cell to hold the entrepreneurs and thus the project together.

CONCLUSION

The project Akshaya, which is primarily intended to bridge the digital divide in the State of Kerala, is eventually benefitting the citizen, government and the business. About 50,000 direct employment are created through 9000 plus entrepreneurs. Investment worth of 100 million US $ come to the state in a short period of 3 years through setting up of Akshaya centres alone. More importantly the project is powerful enough to transform the lives of 6.4 million families of Kerala.