Chapter 41

Inclusive Technology for Rural Development:
Rural Call Centre in Orissa, India

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ABSTRACT

This is a research work on usage of information and communication technology to address the loopholes in the existing system in rural India and suggest an improved way of catering to basic utility services to common people for betterment of their life. The work links all utility related discrete businesses on a common platform and creates a win-win situation for all stakeholders. The model proposed is trying to use mobile phones as a universal communication tool while providing social services in a rural call centre. The work also addresses the relative ranking of services in rural areas based on baseline survey as rural people spend 80% of their expense on obtaining health, transport, and education related information by frequent visits to urban areas. If this model is implemented then it will save time, cost and transport expenses on frequent visit and customer will enjoy the information, tips, and emergency guide line.

INTRODUCTION

Glancing at some rural growth centres and some of the successes of the poverty alleviation schemes, one can easily conclude that the rural economy of India is opening up and developing. Yet, a closer look will show that the rural economy continues to be a stratified and fractured economy, with masses of livelihood seekers near and below the poverty line are being excluded from the benefits of the economic growth. There are many reasons for this and lack of proper education has been found to be a major stumbling block (Agarwal, 2006). Electronic learning or e-learning as it is better known as has come to revolutionize the way education is imparted. Over time there has been increased penetration of information and communication technology in the rural areas. It has opened ways of educating people of all ages and all abilities (Singh, 2005). Success stories like

e-choupal etc. have opened our eyes to the fact that there is a greater need for a wide range of business development services (BDS) to actually enable the rural consumers realise their true business acumen (Agarwal, 2006; Labelle, 2005; Hario, 2008; Mohapatra et al., 2008; Senteni, 2006). There has always been a great deal of information asymmetry among the rural consumers regarding market information, about various services like education, transportation, health, government schemes, loans etc. (Brownder et al., 2005; Shen, 2005; Upton et al., 2004). This study aims to find out the relevant information gaps existing in the areas of education, health, govt. schemes etc. and suggest a framework and approach of the use of information and communication technology platform in providing inclusive and sustainable development for the rural poor.

LITERATURE REVIEW

With advent of technological revolution, relationship between technology, information and knowledge have impacted business models of many organizations. Drucker (1965) stated that creation, organization and institutionalization of knowledge was the first technological revolution in history. However, this relationship has gone through a paradigm shift. Porter (1979) talked of five forces that are important for any organization to maintain its competitive edge. Technology had tremendous impact on the same forces (Porter, 2001) and for organizations, role of technology on these forces for development and maintenance of competitive edge has changed over time. Laszlo and Laszlo (2002) argue that there was greater focus on internal processes aiming at production and managerial efficiency during the first half of the twentieth century. Then technology led competition and economic expansions brought change in focus and it shifted to inclusive technologies, where bottom of pyramid stand to gain the most (Prahlad, 2004) as consumers. Prahlad

(2004) argued that using inclusive technology, not only bottom of pyramid can get benefits, but the organizations will also get profit for sustainability.

Computer and internet led technologies in villages are likely to create a material culture of its own. Farmers or villagers are likely to adopt this culture fast, if they receive enough attention and respect from marketers. It seems that marketers have realized or understood this and they seem to be capitalizing upon attention and respect element (Prahalad, C.K. 2004).However it has to be further explored up to what extent the dignity is created amongst farmers through e –initiatives in India. In the subsequent section, we explore literature work in this area. The next section is divided into following sections – what is inclusive technology, ICT for development (ICT4D), role of ICT in rural development, Call Centre, rural call centre and role of rural call centre in development process.

INTRODUCTION TO INCLUSIVE TECHNOLOGY

Social inclusion is defined as the extent to which an individual or community can fully participate in a society. The access to technology and the ability to use it also influences social inclusion to some extent. There exists a barrier in accessing technology by rural masses which can be categorised as follows:

1. Access to physical resources (hardware)
2. Access to digital information such as software and content
3. Skills that people need to access the devices

The addressal of these issues does not guarantee that the technology will be adopted by its intended users. According to the unified theory of acceptance and use of technology model a technology must be perceived as beneficial, easy to use, and socially endorsed with adequate infrastructure in place to support its use (Ven-

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