Ethnographic Approach to User-Centred Evaluation of Telecentres

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ABSTRACT

Telecentres are considered to be an important means for providing disadvantaged communities with access to Information and Communication Technology (ICT) enabled services. However, there is a limited understanding of how targeted beneficiaries perceive the roles of these telecentres. Using an ethnographic approach, this paper examines the services offered by two telecentres in Bangladesh. An intervention was initiated that enabled groups of farmers to use mobile phones to access services. Based on farmers’ experiences and opinions the authors develop a framework which explicates the dynamic nature of use and appropriation of ICT services.

Keywords: Appropriate Technology, Community Information Centre, Farmers, Grameenphone, Mobile Telecommunications, Pallytathy Kendra, Technology Acceptance

1. INTRODUCTION

This paper argues that a bottom-up approach to the introduction of Information and Communication Technology (ICT) enabled projects and to the appropriation of different ICT tools in accordance with the needs and cultures of rural populace are major prerequisites for those projects to become effective. The paper outlines an approach to the evaluation of telecentre projects which focuses on understanding about how and why the intended beneficiaries make use of, and benefit from, the information and communications made accessible through the centres. If ICT is to have an impact on development, it needs to be assessed from the perspectives of beneficiaries, as opposed to the routine monitoring of operations carried out for NGOs and funders.

An ethnographic approach was adopted in designing and implementing a method of evaluating the services of two telecentre projects in Bangladesh. The research was set out to understand the crucial information needs of rural Bangladeshi farmers and how current and potential interaction between telecentres and farmers could assist in meeting those needs. The principal needs identified related to a lack...
of market information and bargaining power, a lack of scientific knowledge and a lack of information about weather.

This research focused on the role of two telecentres: D-Net’s Community-based Technology Centre (CTC) and Grameenphone and Katalyst’s GPCIC (Grameenphone Community Information Centre). D-Net, a Bangladeshi NGO runs the Microsoft Unlimited Potential Project for their Pallytathya Kendra (a type of CTC). This project was developed to improve access to the livelihood-relevant information for the rural people. On the other hand, Grameenphone is the largest mobile phone operator of the country. Though Grameenphone (widely known as GP) is a profit seeking concern, it is partly owned by the Grameen Bank (a microfinance providing NGO, headed by Nobel laureate Dr. Yunus).

2. RELEVANT LITERATURE

There is considerable doubt about the success of top down approach to implementing ICT enabled projects in developing countries (Kirlikdog & Aydemir, 2005; Leaning, 2005; Nikam, Ganesh, & Tamizhchelevan, 2004). Local contexts need to be taken into consideration while developing contents and applications. In order to conduct meaningful assessments, it is necessary to know whether or not ICT interventions address the local needs. To show the necessity for this approach and to provide the required background and context, this section provides a brief overview of the agricultural structure in rural Bangladesh and outlines the potential contribution of improved knowledge and information to its development. The contribution of ICTs including telecentres to resolving information problems as outlined in the existing research is then examined. The final part of the section provides a critical examination of the main theoretical models used for the analysis of technology acceptance in the information systems literature. While recognizing the conceptual strengths of these models, it argues for their supplementation by models taken from the social science literature in order to capture fully the dynamic interactions between society and technology.

2.1 Farmers in Rural Bangladesh

In a country like Bangladesh farms are extremely small, cultivation is dependent on the uncertainties of variable rainfall and average output is generally low. Value addition in agriculture requires technological, institutional and price incentive changes designed to raise the productivity of the small farms (Todaro, 2000). In addition to activities designed to raise the productivity of agriculture, rural development requires the creation of opportunities outside the agricultural sector which are currently extremely limited.

In 1991 the top ten percent of landowners owned sixty percent of the land, while the bottom sixty percent of landowners had only one percent of the land (Ullah & Routray, 2007). This ownership structure is considered to be a major impediment to balanced rural development (Rogaly, Harriss-White, & Bose, 1999). Small farmers are entangled within a vicious cycle because of sharecropping, tenancy, money lending and other structural and financial relationships with owners and traders (Crow, 1999). The situation of the vulnerable farmers is exacerbated by land erosion, drought, flood, deforestation and other natural calamities. This together with lack of financial power reduces farmers’ propensity to take risks. Lack of bargaining power raises input prices and reduces net earning which in turn impacts negatively on farmers’ productivity.

Imperfect information and high transaction costs can constitute major impediments in the agricultural marketing process (Dao, 2004). Proper dissemination of information for agricultural and rural communities has the potential to allow farmers to improve revenues while reducing the associated transaction costs and production costs. Information generally helps the poor to avail of the opportunities
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