Chapter 14
Why Institutional Partnerships Matter:
A Regional Innovation Systems Approach to Making the ICT for Development Projects More Successful and Sustainable

Rajendra Kumar
Ministry of Communications and Information Technology, India

ABSTRACT

This chapter examines the role of institutional partnerships in making the ICT for development projects more successful and sustainable in developing countries. Employing a regional innovation systems (RIS) perspective, I examine this issue in the context of lessons drawn from the failure of telecenters in Melur taluka of Tamil Nadu under the Sustainable Access in Rural India (SARI) project. These telecenters aimed at delivering a host of services such as email, voice chat, health, e-government, and agricultural and veterinary services to the rural community. They were operated by two sets of operators: self-employed local entrepreneurs and a local NGO. After operating for nearly three years, most of the kiosks run by the self-employed entrepreneurs had closed down by mid-2005, whereas those run by the NGO were still operating. Using primary data from interviews with the kiosk owners and operators, I argue that the failure of the kiosks to sustain themselves was due to weak institutional linkages and networking among actors in the local and regional innovation systems, and the inability of the RIS to evolve and respond effectively and quickly to the changing preferences and needs of the rural community. I conclude that ensuring a project's success and sustainability requires the presence of an effective regional innovation system with strong but flexible and dynamic linkages among the relevant actors such as the state, universities, private sector, civil society organizations, the user community, and the funding organizations.

INTRODUCTION

Information and communications technologies (ICTs) have assumed great importance during the

past nearly two decades as the primary tools to foster social, economic, and political development in developing countries. They have fundamentally changed the way we communicate and access information. Scholars have claimed that they have the potential to cause impact on human society on

a scale comparable to that of the industrial revolution (Alberts and Papp 1997) and they can deeply impact democratic institutions and democratic governance (King and Kraemer 1997). In the context of developing countries, ICTs have been acknowledged as major instruments of development in a variety of areas: empowering communities by increasing their access to information and widening the opportunities available to them; e-governance; delivering services such as health; education; etc. Information and knowledge lie at the heart of economic and social development and ICTs are perceived to be the key to harnessing these for achieving international development goals (The World Bank 1998; Chataway and Wield 2000; UNDP 2001; Velden 2002). Several major international initiatives such as The Digital Opportunity Task Force constituted by the G-8 in 2000; the Global Digital Opportunity Initiative, a global public-private initiative of UNDP and some other organizations; and the Global Development Gateway (2001), an initiative of the World Bank, have all acknowledged the great potential of ICTs in bridging the international knowledge and information divide.

Encouraged by the huge potential of ICTs in enabling development, almost all developing countries have launched ICT for development projects aimed at bringing the benefits of ICTs to the rural and poor communities, which typically have low individual ownership of ICTs. However, though these projects have been in existence for well over a decade now, scholars have noted that most of these projects have either failed completely or have succeeded only partially in achieving their objectives (Heeks 2003a). Heeks (2003a) has noted that only 15% of the e-government projects in developing countries can be classified as successes, while 50% have been partial failures and 35% have failed completely.

Analysts have attempted to analyze the reasons for failures of specific projects in developing countries. Cecchini and Raina (2003) studied one such project on e-governance in rural India and found that usage of the services was low and the poorest people were seldom using the services. In a study of a community-based e-government initiative in South Africa, Benjamin (2001) found that lack of regularly updated content and interactivity led to the failure of the project. Heeks (2002) has noted several more cases of total or partial failure of ICT initiatives in developing countries. Researchers have also found that lack of government support, flaws in the design of the projects, and low market demand for these services have led to limited success or partial failure of these projects in developing countries (Dagron 2001; Proenza 2001; McNamara 2003).

Analytically, researchers have tried to explain the failures of these projects in terms of critical success and critical failure factors (CSF and CFF) (Heeks and Bhatnagar 1999), 'design-actuality' (Heeks 2002) or 'design-reality' gaps (2003a), poor economic sustainability of rural ICT projects (2002), or political and institutional factors due to lack of commitment on the part of political leadership and public managers (2000). A sustainability failure model has also been advanced to examine projects that succeed initially but fail to meet their objectives in the long-term (2006).

Though the approaches noted above help us in understanding the reasons for success or failure of these projects, they fail to adequately take into account the institutional factors behind the failure of such projects. In the context of ICTs as innovations, these factors include the institutional processes and linkages among various institutions and actors, both public and private, that lead to innovation and its diffusion among the users. In this chapter, I examine the institutional factors behind the failure of one such project using a regional innovation systems (RIS) perspective.

Specifically, I examine the sustainability failure of the privately owned and operated telecenters under the Sustainable Access in Rural India (SARI) project in Melur taluka in Tamil Nadu in India. Aiming at rural social, economic, and political development, this project had established 78

Related Content

The BIM Model as an Opportunity Area for Sustainable Processes in Green Library Buildings
Humberto Martínez-Camacho, César Saavedra-Alamillasand Eugenia de los Ángeles Ortega-Martínez (2023). *Global Perspectives on Sustainable Library Practices (pp. 157-167).*
www.irma-international.org/chapter/the-bim-model-as-an-opportunity-area-for-sustainable-processes-in-green-library-buildings/313608

Fostering Creativity in Business: Empowering Strong Transformational Leaders
Cristina Raluca Gh. Popescu (2022). *Handbook of Research on Changing Dynamics in Responsible and Sustainable Business in the Post-COVID-19 Era (pp. 349-381).*
www.irma-international.org/chapter/fostering-creativity-in-business/294427

Partial Fuel Subsidy Removal in Nigeria: Its Effects on the Economy and Agricultural Sector
Dorothy Patience Ani, Emmanuel Adah Onojaand Isaac Terna Humbe (2021). *International Journal of Social Ecology and Sustainable Development (pp. 98-114).*
www.irma-international.org/article/partial-fuel-subsidy-removal-in-nigeria/266252

Philosophy of Information Technology: Sex Robot and Its Ethical Issues
Budi Yuliantoand Shidarta (2015). *International Journal of Social Ecology and Sustainable Development (pp. 67-76).*
www.irma-international.org/article/philosophy-of-information-technology/142148

Rural Livelihood Activities: A Case Study of Awra Amba Community
Ebabu Chekole Mengistu (2022). *International Journal of Social Ecology and Sustainable Development (pp. 1-17).*
www.irma-international.org/article/rural-livelihood-activities/293246