

## Chapter 9

# From Rural Outsourcing to Rural Opportunities: Developing an ICT Mediated Distributed Production Enterprise in Tamil Nadu, India

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### ABSTRACT

*Inspired by the potential of Information and Communication Technologies, henceforth ICTs, for socio-economic development, and supported by a university based technology and business incubator, Rural Production Company, henceforth RPC, was set up in 2007 employing an ICT-mediated distributed production model. This paper reveals how RPC, initially an exploratory project whose key innovation was its Internet kiosk-facilitated model of crafts production and local empowerment, morphed into a social enterprise catering to global demands. The context of innovation provided by the Incubator led to a transformation of an ICT4D (ICT for Development) project into a business venture through the practice of formal and informal questioning at every stage of its implementation. This paper focuses on the iterative method adopted while highlighting the role of the incubator in the overall design and development process of the enterprise. This paper is a reflexive mapping of the organization's evolution from the original research agenda of outsourcing production cum rural employment, to one that privileges local networks both as a conscious business strategy and as an arena for collaborative change for human development.*

### INTRODUCTION

This paper follows the conception and growth of a social enterprise developed within the context of a university based incubator. It presents the unique incubation context of innovation and enterprise

development of a production company involved in rural crafts by spotlighting the reflexive practices within its development process. The study is set against the backdrop of advancements in affordable technologies for rural connectivity (Jain & Raghuram, 2005; James, 2002; 2004; Jhunjhunwala, n. d.; Jhunjhunwala, Ramamurthi, & Gonsalves, 1998) on one hand, and research

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in distributed production models (Holmstrom, 1993; Johansson, Kisch, & Mirata, 2005; Mathew, 1997; Oram & Doane, 2005) and crafts production (Brouwer, 1999; De Neve, 2005; Liebl & Roy, 2004; Mies, 1982; Kawlra, 1998; Venkatesan, 2009; Wood, 2000) on the other.

It's still wider relevance lies in going beyond narrow technological determinist views of ICT and development towards one that views technology as both facilitating and enhancing capabilities (Castells, 2000; Fukada-Parr, 2003; Grunfeld, 2009; Gurumurthy, 2008; Heeks, 2002, 2009; James, 2004; Sen, 1999). Presenting a detailed reflection of the stages in the growth of the organisation along with a conscious recognition of the role played by the incubator during its developmental course, it is hoped, would provide a closer look into the significance of academia-led innovation for a more dynamic and sustainable engagement with local actors in rural contexts. It will be appropriate, therefore, to commence the discussion with an understanding of incubators in general and the distinguishing features of the specific incubator in particular.

## **THE INNOVATION CONTEXT OF UNIVERSITY BASED INCUBATION**

Incubators, in general, are seen as innovation spaces where entrepreneurs and business ventures receive various kinds of support for a sustained period of time to develop and commercialize new products, new technologies, or services. Typically this is accomplished through “job-creation” and “wealth generation” which are viewed as a means to focus on the wider community through the agency of the entrepreneur often, mediated through technology (Almirall, 2008; Carayannis et al., 2006; Castells, 2000; Chesbrough, 2003; Scaramuzzi, 2002; Sein & Harindranath, 2004; Schaffers et al., 2007; Schaffers & Kulkki, 2007; Steyaert, 2000).

The aims and approaches of incubators vary from country to country and cater to the unique entrepreneurial ecosystem of its country of location (Akcomak, 2009; Chandra, 2007; Lalkaka, 2001). In the developing world, incubators are viewed as important means of economic development through the promotion and growth of micro, small and medium enterprises and actively supported through programmatic funding and policies by governments through business incubation (Scaramuzzi, 2002). The various functions and services of incubators include – physical space and business centre facilities; technology and human resources; management and administrative (accounting and legal) support; information and data support; mentoring, diagnostic and crisis support; and access to finance and venture capitalists.

University-based incubators, in particular, are usually set up in or near the institution's campus, have the involvement of its students and faculty, and vary in model, size and goals. Typically they are committed to forge linkages between academia, the industry and the government towards the macro-goal of economic development. This approach has been termed the “triple helix model” of regional development where entrepreneurial universities transfer knowledge to the industry via the mechanism of incubators, for the benefit of society (Etzkowitz, 2002). While it is believed that knowledge-based growth would in turn foster more research funding and stimulate greater interaction (networks) between the three partners or stakeholders and in turn also sustain the incubators, the triple helix model has shown limited success (Cooke, 2005; Gunasekara, 2006). Other “innovation intermediaries” like the European Living Labs (‘living laboratories’) also support business innovation by providing a structured environment within which new technologies, products and services are designed and validated with the participation and feedback of actual users in real life settings (Almirall, 2008; Schaffers et al., 2007; Schaffers & Kulkki, 2007).

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