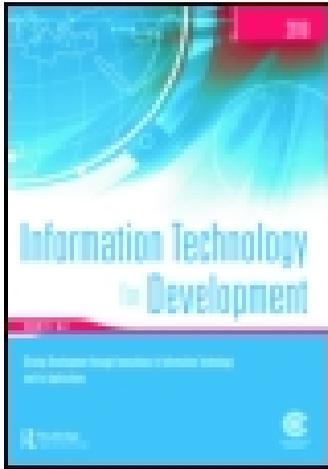


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Technology Diffusion in the Telecommunications Services Industry of Malaysia

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Technology Diffusion in the Telecommunications Services Industry of Malaysia

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This study empirically models technology diffusion and incorporates a more comprehensive framework in understanding the diffusion process of telecommunications technology in Malaysia. We inductively assess the government's conduct in translating the productive rents for upgrading activities. The results show that the proactive role of the government when intervening in market operations has considerably influenced the technology diffusion process. The telecommunications services industry of Malaysia achieved a critical mass of entrepreneurs by first engaging business entrepreneurs in contract services from Malaysian Telecommunications Department, then moved to business diversification at the end of 1970s and is now developing a market platform to furnish its sustainable telecommunications system. We highlight positive general macro-meso views of our case and provide salient normative principles as guides for transformational policy-making. The principles discussed in this paper provide policy lessons, or at least some initial guide, for other developing economies aspiring to follow the path of technology upgrading and development.

Keywords: rents management; diffusion; normative principles; telecommunications services industry; Malaysia

1. Introduction

Studies on the information society have been the subject of intense scrutiny among scholars and policy-makers due to its potential implications on the larger society – as well as on industrial development (Freeman & Soete, 1997; Mansell & Wehn, 1998). Indeed, the explosive growth and development of telecommunications technology in recent decades has opened up numerous industrial development opportunities for developing economies, particularly in the East Asian emerging economies (see Langdale, 1997; Wong, 2002). A number of studies explored and generalized the industrial development patterns for telecommunications technology and described the rationale behind the success of production and diffusion of telecommunications technology (see Ng, Lu, Li, & Chan, 2004; Frieden, 2005; Gao & Rafiq, 2009; Lee & Chan-Olmsted, 2004; Singh, 2000). Common themes and lessons gained from this set of studies provide useful clues and guides for those trying to organize production and diffusion of telecommunications technology. Indeed, contribution to the literature of telecommunications technology gained additional momentum with the use of other frameworks such as the model of innovation system conceptualized by Edquist's (2003) telecommunications system of innovation (see Mani, 2007), Teece's (1986) integration strategies for technological innovation (see Krafft, 2010), Rogers's (2003) diffusion model (see Lim, Choi, & Park, 2003)

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Heinz Weistroffer is the accepting Associate Editor for this article.