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Collective Action, Competitiveness and E-Business Technologies

7.1 Introduction

This chapter discusses four important factors identified in our study that tend to be closely associated with the adoption of e-business: the potential business activities in which e-business technologies can be adopted, the availability of reliable and affordable ICT infrastructure, the potential gains expected from e-business and the impediments associated with e-business in a developing context. It is difficult to cover all these aspects in one study; we therefore focus on a limited number of objectives in this chapter, which are:

- factors that discriminate advanced users of e-business technologies from others;
- the impact that the perception of management has on the adoption of new technologies;
- impact of the competitive environment on the diffusion of e-business technologies;
- the role of the institutional environment in the growth of e-business; and
- the role of collective actions in the diffusion of e-business technologies.

The remainder of the chapter is organized as follows: The analytical framework and methodology are discussed in Section 7.2. The MDs’ perceptions about the benefits and driving forces behind ICTs adoption are presented in Section 7.3. The hypotheses related to the factors that discriminate advanced users of e-business technologies from other firms are discussed in Section 7.4 while Section 7.5 presents and discusses the statistical results. The findings of the study are summarized in Section 7.6.
7.2 Analytical framework and methodology

The programmability, interactivity and networking capabilities of ICTs leads to a number of advantages in the production and export of goods and services, thereby contributing to an improvement in the performance of the firms. The impact of IT on the conduct of firms can be viewed in terms of labour productivity, time saving, reduction in inventory holdings and the reduction in wastage, in ensuring better co-ordination and flexibility in production design, along with improved product quality. ICTs-based production systems require capital and necessitate high-skill labour to exploit their full potential. Hence, ICTs adoption influences, and is simultaneously influenced by, firm performance and conduct. The mutual reinforcement of ICTs and other characteristics of the firms’ conduct and performance will thus form a virtuous circle. Figure 7.1 depicts the analytical framework that encompasses the use of new technologies, performance and the conduct variables of the firms.

The adoption of e-business technologies is a function of several factors, including international orientation, competitiveness, efficiency in business processes, optimization of resource used, availability of telecommunications infrastructure, size of firms’ operation and so on. Many times, these factors mutually reinforce each other. International orientation, represented by imports, exports, and technological and financial collaboration, and the adoption of e-business mutually reinforce each other. This is because the use of ICTs generally results metaphorically in the death of