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#### Chapter XII

## Software Outsourcing Prospects for Small Developing Countries

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#### **ABSTRACT**

Developing countries have been utilizing information and communication technologies in the management of their business and administrative affairs to improve efficiency and effectiveness; at the national level also, they have been innovative with the establishment of information services sectors. From the initial provision of data entry services some developing countries, as participants in the global software outsourcing movement, have embarked on the development of software for export. Many challenges ranging from insufficient skilled personnel to becoming competitive in a fierce marketplace will be faced. This chapter examines the participation of two small Caribbean countries and describes education and training initiatives and other policy approaches taken by them. The consensus is that, while they will hardly ever make a significant impact on global outsourcing, such small developing countries can achieve substantial economic benefits, stimulate their domestic Information Technology environment and attain an enhanced technological capability.

#### INTRODUCTION

Since the early seventies, developing countries have sought to harness information technology to attain social and economic development. Benefits have been realized in

- efficiency through the automation of administrative functions and
- effectiveness through the provision of improved information for decision-making purposes.

Some countries in the Caribbean have additionally attempted innovation in IT utilization through the creation of new products and services and the establishment of new relationships with corporations in the developed world. In their creation of an Information Services Sector three decades ago, these countries initially were content to start at the lowest rung of the ladder with data entry. The intention was to progress toward software development and other professional services at the upper end, through a gradual upgrading of skills and technical capability. According to the Development Plan 1983-1987 of the Barbados government's investment agency, these upper end services would expand the sector's contribution to the economy and provide better employment opportunities (Nurse, 1996).

The provision of the lower end offshore services was targeted at North American markets and Caribbean countries possessed several advantages:

- Affordable labor cost
- Reasonably high quality, if not competitive, telecommunications services
- Linguistic and cultural affinities
- Time-zone affinities
- Transport convenience
- Open environment for investment

Over a decade ago, Barbados and Jamaica, satisfied with their progress in the provision of lower end services and in the diffusion of IT in their respective public and private sectors, decided to become involved in software development for export. In both countries, much of the utilized software was developed in-house. This was a reflection both of the types of applications implemented and of a desire to develop the programming competence and confidence of their programmers.

The success of India, Ireland and a few other developing countries in software development for export also served to motivate these Caribbean countries to stake their claim for a piece of the pie. This would call for adherence to standards and deadlines such as had seldom been required with software development for domestic entities. In their attempt to tackle software development for global markets they were apparently convinced of their ability to leverage their initial success in the Information Services sector. Meanwhile in the private sector, accounting and billing applications were now commonplace and some software houses were engaged in the initial stages of software provision for the local and regional markets.

Planners in these countries were influenced by a number of factors:

- An eagerness to leverage their successes at creating locally a technological awareness and developing competence at the basic entry level of the software industry.
- Queries for software services that were made at their investment offices in North America.
- Their near-shore location that benefited investors who wished to be able to visit the home offices of their outsourcing partners.

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