Chapter 16
Financial Aspects of National ICT Strategies

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ABSTRACT

All developing and industrialized countries strive to get benefits of information society and to this end almost all of them have developed strategies for effective utilization and development of Information and Communication Technologies (ICT). These strategies usually require substantial funds from domestic and international sources and national strategy documents usually pronounce the possible sources of these funds. This chapter analyzes the types of these sources for several countries.

INTRODUCTION

Information and Communication Technologies (ICT) had an unprecedented pace of development in the second half of the 20th Century and beyond. They have diffused to all aspects of life in industrialized countries where only a minority of humanity live. Yet, reflecting the broader economic and social disparities, level of diffusion of ICT in developing countries is less than ideal. As a result, a major divide that is based on the production and implementation of ICT has been formed between industrialized and developing countries. Although there are some areas where this digital divide has the tendency to be bridged, it seems to be widening between developing and developed countries in the big picture.

Anxious for “not missing the train once more after the industrial revolution”, developing countries are striving to catch up the developed world. To this end they develop strategies, plans, and blueprints for diffusing the implementation of ICT in their citizens’ daily lives. Industrialized countries which do not want to be left behind are also spending the same effort. Lately, there has been a considerable effort in almost all countries to develop their ICT strategies. These efforts gained momentum with the call of First World Summit on Information Society (WSIS) that was held in Geneva in 2003 where “development of national
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Table 1. Traditional budgeting and budgeting for ICT investments

<table>
<thead>
<tr>
<th>Focus of traditional government budgeting</th>
<th>Characteristics of high-value ICT investments</th>
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<tr>
<td>Single-year (or biennial) expenditures</td>
<td>Multi-year investments</td>
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<td>Program-by-program performance</td>
<td>Enterprise or cross-boundary performance</td>
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<td>Financial cost/benefits</td>
<td>Financial and non-financial costs/benefits</td>
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<td>Level of effort within existing work flows</td>
<td>Changes in the flow of work</td>
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<td>Ongoing operations</td>
<td>“Start-up” operations</td>
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<td>Control</td>
<td>Innovation</td>
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e-strategies, including the necessary human capacity building” is encouraged for all countries. This call was iterated by the second WSIS conference in Tunis in 2005. The WSIS conferences regarded ICT as an important tool to achieve the Millennium Development Goals (MDG) by 2015. The MDG are about improvements in the following areas:

1. End poverty and hunger
2. Universal education
3. Gender equality
4. Child health
5. Maternal health
6. Combat HIV/AIDS
7. Environmental sustainability
8. Global partnership

National ICT strategies usually have ambitious (and sometimes unrealistic) targets about transforming the whole country towards “information society” (Machlup, 1962; Bell, 1999). Such a transformation requires massive investments not only for hardware and software acquisition, but also for diverse areas such as ICT education in different segments of the society and technology support for private firms. There are also various hidden costs such as possible tax waive for ICT hardware. Although developed countries usually do not have much difficulty for allocating some funds in the national budget for realizing their strategies, it is a challenge for developing countries to create and mobilize funds for that aim.

This chapter analyzes the sources of ICT investments for some countries in the framework of their national ICT strategies. The strategy documents usually provide adequate material for such an analysis and those documents are used as the major source of information. The effectiveness of spending large amounts is also investigated and some caveats are drawn.

The chapter is organized as follows: The next section contains literature review about some important aspects of national ICT strategies in terms of financial resources. The following section explains data collection and analysis methodology of this research and it is followed by a section which discusses domestic and international sources of ICT investments. The subsequent section depicts some attributes of the strategies of thirty countries along with their financial resources. The last section concludes the chapter.

PREVIOUS LITERATURE FOR FINANCING NATIONAL ICT STRATEGIES AND POSSIBLE PITFALLS

ICT investment can be realized with resources in or out of the national budget. National budget investments for ICT exhibit some dissimilarity from traditional types of public investments. Harvard Policy Group (HPG, 2001) lists these dissimilarities in government budgeting as in Table 1.
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