Chapter 5.6
Virtual Organizations in Post–Graduate Education in Egypt

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BACKGROUND

New online learning techniques lead to improved ways to investing in larger numbers of people and optimizing the use of resources. Respectively, virtual organizations are gaining grounds in the education sector with its vehicle capable of closing the digital divide and spreading knowledge that can help improve the literacy rate. This chapter covers the case of the Regional IT Institute (RITI), an institute located in Cairo, Egypt, that specializes in providing quality education in the fields of information and communication technology and management. The institute's goal is to educate more students while overcoming the challenge of scarce resources, trying to meet the needs of 30% of the population (70 million) enrolled in education programs (Economic News Bulletin).

The model used by the institute in delivering its programs is a hybrid model that combines traditional with unconventional techniques, capitalizing on normal class settings as well as advanced information and communication technology tools. In 1985, information technology was prioritized on the national agenda by the government of Egypt, so information technology became one of the building blocks of the development process. Moreover, in 1999, the Ministry of Communication and Information Technology was established to accelerate the build up of the nation's information and communications infrastructure and the creation of a mechanism for knowledge acquisition and dissemination to bridge the gap between "the haves and the have-nots," both internally and with the developed world.

VIRTUAL ORGANIZATION EVOLUTION

Continuous innovation in information and communication technology is leading to the evolution of virtual organizations with different forms and structures. The virtual integration of its capacities—irrespective of time, effort, and distance barriers—enables it to become more competitive and to achieve market differentiation and better performance (Appel & Behr, 1997). Virtual orga-

nizations (defined as interconnected organizations capitalizing in their internal and external communication on evolving IT tools and techniques) help in consolidating and rationalizing the resources allocation that is vital in the 21st century, since the focus will be on addressing information and knowledge intensive issues where the critical element is people or "humanware" (Kamel, 1998). The concept of virtualness will be important to help in training and educating more people on diversified subjects (Kamel, 1999). However, the virtual organizations' success will mainly depend on whether the knowledge distributed is accessed by the right people, at the right time, from anywhere around the globe.

Egypt and the Knowledge Economy

Since 1985, Egypt has invested heavily in human resource development, with over 1500 training centers established across the nation's 27 provinces, and has had a remarkable impact on the skills and knowledge development of the populations in these areas. However, with over 14 million students in schools and universities, the challenge is to develop different type of programs to educate and train more people, given the limited resources. Therefore, a virtual learning model represents an opportunity that could help realize educational and training objectives if the learning model could be disseminated among the community of learners and educators. The model could be in the form of strategic alliances with institutions worldwide to deliver degrees for the local market using state-of-the-art information and communication technology. This would not be an unusual model or one difficult to conduct. However, the successful implementation of this model would depend on a focus on details, such as following up with students, coordination between the alliance administrations, and adaptation of the cultural aspects.

The Regional IT Institute (www.riti.org) uses a virtual learning model like the one just described. It is a hybrid of tools and program techniques selected and tested to match the needs and requirements of the local market in Egypt and adapted to the cultural values and norms of the community of learners. The model represented by the Regional IT Institute works as a base for a satellite of programs conducted in cooperation with a multiplicity of institutions worldwide. The institute was established in 1992 to support in the transformation of the society using the latest technologies and methods in education and training; its motto is "Building through learning." The Regional IT Institute programs are jointly delivered with collaborative institutions disseminating knowledge through the use of hybrid methods including class sessions and distance learning techniques. The model is built around trust between the involved parties (Brigham & Corbett, 1996) and with neither a hierarchy in place nor a leading role played by any of the involved parties (Appel & Behr, 1997).

A VIRTUAL LEARNING MODEL

The Regional IT Institute is a not-for-profit organization supported financially by its programs. It is a leader in the market and extends its services to countries in Europe, Africa, and Asia. As of December 2003, the Institute, through its virtual model, has enrolled over 1,250 students in its post-graduate degree programs (611 have graduated) and over 13,000 students have participated in its training programs, representing 1,100 organizations in 90 countries. The Institute has a state-of-the-art information and communication technology infrastructure that is a key success factor enabling the connectedness to its partners, whereas being connected to its partners is the enabling factor to and thus realizing organizational virtualness. This same state-of-the-art infrastructure also serves as the platform for information acquisition and knowledge dissemination (Byrne, Brandt, & Port, 1993; Davidow & Malone, 1993;

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