Chapter 20

Leapfrogging an IT Labor Force: Multinational and Indigenous Perspectives

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Throughout the world countries recognizing the economic benefits of IT are rapidly developing information sectors. Advanced industrialized nations have been moving gradually from industrial to post-industrial work while newly industrializing nations are leapfrogging directly from agrarian to information-intensive work. At the close of the twentieth century some interesting tensions result from these two types of nations moving in the same direction. An important issue for both advanced industrialized countries and newly industrializing nations is the human resource issue. Managers at multinational firms as well as policy makers in newly industrializing countries recognize the need for developing qualified IT personnel. The Irish IT sector provides a valuable setting for studying human resource issues associated with the rapid development of an information sector because it affords the opportunity to explore both the multinational and the indigenous viewpoints. Two key human resource issues for the global IT sector are explored in this paper: ensuring a supply of qualified IT workers in the host country and managing IT workers in a cross-cultural work environment. This paper is based upon an ethnographic study of the information sector in Ireland. The issues that are raised represent the experiences of American and Irish managers, Irish policy makers and Irish IT workers.

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As the global economy moves further into the post-industrial era, nations around the world see opportunities for economic development in the information sector of their economies. Advanced industrialized nations have been moving gradually from industrial to post-industrial work over the past several decades and have spawned the multinational IT companies which have enabled the development of a global information sector. Newly industrializing countries, on the other hand, have been leapfrogging in recent years directly from agrarian to information-intensive work. At the close of the twentieth century, some interesting tensions are resulting from both economies moving in the same direction. A critical consideration in the development of a global information sector is the human resource issue: the development and management of appropriately qualified information technology (IT) workers. These are the individuals who fuel the information economy by producing the computers, developing the software and providing the information services that keep it running.¹

Ireland provides a valuable context for examining IT human resource issues in the information sector for several reasons. Because it developed its information sector through inward investment by multinational firms, the case of Ireland includes two different points of view: 1) that of multinational IT firms from advanced industrialized nations; and 2) that of ‘second wave’ countries typically, newly industrializing countries. Second wave IT countries such as Ireland are those which are taking an alternate path into the information economy by rapidly moving directly from an agrarian or partially developed industrial economy into an information economy. They have been doing this in the last few decades of the twentieth century. They stand in contrast to ‘first wave’ countries — typically advanced industrialized nations — which have been moving into the information economy after a gradual transition from an agrarian through an industrial to a post-industrial economy. In addition, since Ireland has been actively engaged in developing its information sector for thirty years, there is ample opportunity to critically analyze the experiences of policy makers, Irish workers and managers, and multinational managers in order to offer some useful lessons applicable to other contexts.

This paper addresses some issues encountered by Irish and American IT professionals in the development of an Irish IT work force in conjunction with an economic development policy of inward investment by multinational IT firms. Specifically, this paper addresses two important sets of human resource issues. The first set relates to ensuring a supply of appropriately qualified IT workers. These issues range from educational policy to creating a national
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