

The firm need not be the first in the market. It may be second or third to enter, capitalizing on the mistakes of the forerunners. But once a firm with a new product is well located, has forged the appropriate contacts, and is sure of the commercial viability of its product, learning curve economies give it a cost advantage over its actual or potential rivals. The cost advantage allows the firm to cut prices and increase its market share. The larger the firm's market share, everything else equal, the greater its cost advantage. In turn, the greater the cost advantage, the greater the ease with which the firm can achieve and maintain a dominant share until, inevitably, a better product or service comes along.<sup>16</sup>

An example of a niche firm that succeeded by "learning" to dominate a market is Cognos, the largest Canadian-owned package software firm. Cognos achieved a 70 per cent world market share in fourth generation language software employed in Hewlett-Packard computers. The Cognos example is apt in that it illustrates that success can come from what to outsiders may appear as undue narrowness. Of course, if the narrowness that a niche implies were to carry over to the firm's ability to develop new products for the future, then niche strategies will eventually backfire.

#### 4.3 Two Essential Types of Knowledge

Success in high-tech niche markets depends on having two types of knowledge. First there is what can be called "scientific knowledge," associated with invention and technological innovation that is the basic output sought from formal R&D expenditure programs. Its fruition takes the form of new goods and services and new and improved production processes.

Second there is "time and place specific" knowledge, knowledge that is neither general nor can be known to everyone.

Instead it exists in dispersed form and is usually known only by those with a direct interest in that particular bit of knowledge. Much economic knowledge is of this sort. For example, the price, quality, quantity and other relevant dimensions of product x at point a (one of literally thousands of products or services at just as numerous geographical points) will be known to those who wish to sell or purchase x, but not to others whose interest is in y, z, w, etc. at points b, c, d, etc.

While most academic attention naturally focuses on "scientific knowledge," it is clear that in the economic-business realm "time and place specific" knowledge is of at least equal importance. Being able to take advantage of opportunities as they arise is knowledge of the second type. Success in the market involves not only having a good idea, which may be characterized as "scientific knowledge," but the "time and place specific" knowledge of where, when and how to commercially exploit that idea.

For Canadian firms wishing to exploit opportunities created by Europe 1992 both types of knowledge are crucial. Scientific personnel can provide the basis for new products and services. Public and private agencies can provide information on the new rules of the game. But only the firm itself is in a position to take advantage of a new idea within the newly defined rules of the game.

#### 4.4 Importance of an EC "Presence"

The distinction between types of knowledge has some implications for firms wishing to take advantage of Europe 1992. First, the importance of "time and place specific" knowledge implies that high-tech firms will need some form of EC presence, even if there is no legal requirement (as there will be for government procurement) of EC content. Thus, Canadian firms are unlikely to have the luxury of simply relying on arms-