

## Information as a Strategic Resource

Notions such as "strategic planning for IS" (SPIS) and "information resources management" (IRM) have become popular in the literature and practice of IS in recent years. However valuable these ideas and practices may be, the manner in which they are generally implemented leaves much of the potential of information and IS unfulfilled.

Much of IRM still views information merely as a resource to be "well managed" in the same gutsy sense that one thinks of managing people or of managing funds efficiently. This is a giant step beyond the old viewpoint in which information and computers were viewed as "special cases" that defied good management in the traditional sense; but it is far short of that which is possible.

In the same way, a process of strategic planning for IS can lead to the prescription of a role for information management such as one that I saw recently: ". . . the *sole purpose* is . . . to satisfy end users (including management)." Again, while this may be a great advance over the "bad old days" in which users were not given their due, it is far short of the potential role that IS can play.

Even an SPIS process that closely ties in IS strategy with business strategy, however desirable that may be, is inadequate. This is so because information-based strengths, weaknesses, opportunities and threats can be used to *influence business strategy*.

*Information and IS has the potential to be a primary source of comparative business advantage in the marketplace*, rather than merely a resource to be efficiently managed, or a service that is periodically turned on and off as needed, much as the hot water and the air conditioning are turned on and off as needed.

This simple notion of *information and IS as a potential source of comparative advantage* has been implemented, and the benefits have been realized, by some firms. For instance, the recent controversy about American and United Airlines using their computer reservation system to gain market advantage over their competitors (merely by giving a preference to their own flights in the order in which flight possibilities are displayed) is a case in point. So too is Merrill Lynch's Cash Management Account: a new product created on the basis of an innovative information processing capability that produced a four-year lead time over competition, hundreds of thousands of new customers and many billions in new assets under management.

Other companies, such as Foremost-McKesson, have used innovative information systems to gain a competitive edge in a non-information business; in their case to make major changes in the structure of drug wholesaling and to get into new information businesses such as the processing of insurance payments related to drug purchases. In the "information industry," examples of this are common. For instance, Dun and Bradstreet systematically searches through its existing databases to identify potential new "products" that can be formulated from existing data. The resulting new products that have been created number in the hundreds.

In more mundane manufacturing environments, this can be done as well. For instance, a firm with whom I have worked developed a product cost information system to help manage its large and diverse product line. Based on the availability of accurate cost data, it then developed an integrated program of product pricing and sales incentives that has resulted in the firm becoming the most profitable in its industry. This has occurred not because of a cost advantage, but rather because of an *information-based comparative advantage* concerning costs that it has over its competitors. It merely knows its true costs better than competitors know theirs, and it has used this information to good advantage.

To accomplish this on something other than a fortuitous basis requires an awareness of the potential for information on the part of specialists in the field, an understanding on the part of top management, and a systematic process for performing the necessary planning and analysis.

The process should be one in which an appropriate strategic role for information and IS is identified and plans are developed for achieving this new role. As well, a complementary process of identifying

*Editor's Comment*

information-related strengths and opportunities that can be used to influence changes in business strategy must be simultaneously carried on.

If we are ever to truly be the "information society" that has been so widely discussed, we in the IS area must begin to carry the banner for information far beyond the mere "good management" of information. When it becomes commonplace for firms to use information as a basis for gaining advantage in the marketplace, just as efficient factories, good products and other resources are now commonly used to gain such comparative advantage, we will be fulfilling the promise of the information society.

**William R. King**  
**University of Pittsburgh**