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Preface

The business manager is buffeted by global as well as national economic pressures. For instance, when the United States central bank, the Federal Reserve Board, tightens monetary policy, the effect is felt around the world. When interest rates are raised in response to accelerated economic growth and anticipated inflationary pressures, rates rise almost instantly in countries as far away as Australia and New Zealand. Otherwise, in the global financial market, capital would immediately be moved to where a higher return was possible. The result is a rise, virtually world-wide, in the cost of capital.

Accompanying the world-wide interrelationship of financial markets is the phenomenon of globalization. Trade and commerce are international as never before. But diversity of trade implies a diversity of markets, and indeed, a diversity of customers. Tastes vary. The customer is becoming much more discerning and is the ultimate arbitrator. Companies are not dealing with mass markets any more. Firms that can meet the diversity of customer demand survive. Those that do not go to the wall.

In answering the competitive challenge, companies have to come to grips with a new management imperative – *responsiveness*. Responsiveness to an increasingly dynamic and competitive market, responsiveness to an increasingly astute and discriminating customer. “Bigger is better” has often been replaced by “small is beautiful”. And so managers have changed the way their companies are organized, and how they are managed. They want to be closer to their customers and understand their needs. They want to respond with better service, better quality, a wider choice, more options. In short, they want to survive.

To understand the role that the IS function must play in this environment, it is important that we understand the forces that cause an organization to be run the way it is, and which, in turn, influences top management to make the kinds of decisions they do. For computers are no longer merely a tool to add up and analyze columns of figures. Rather, in combination with communications technology, they can have a profound influence on the way that the organization is managed, and on how its products are produced and delivered.

Over the last few years it has become increasingly common to hear an Information Systems department described as “a business within a business”. It has become much more service oriented than in the past when its prime concern was managing technology. In fact, in some organizations, “IS” stands for the Information Services. As a business, IS like many others, supplies a range of services to its customers, generally the managers of business units or departments. The managers in turn purchase the services they require from IS. The price paid is usually negotiated, often as part of a contract or “service agreement”. In many organizations, the managers are free to purchase these services outside the organization, from an outside supplier (called “outsourcers”, for example, IBM, EDS). Thus the IS manager is, in a very real sense, in

competition, and under pressure to operate his/her “business” in as efficient a manner as is possible, and to provide a quality service to the corporate customers.

Part of a successful IS manager’s job is to be responsive to the parent organization as it engages in the thrust and parry of the competitive marketplace. The company or business unit will develop various strategies (“options”) as it advances its business activities. The IS manager will want to be aware of the nature of these “strategic options” and to be in a position to offer a specific range of services that would enhance the opportunity for success for each of the various options. Hopefully, he or she will be able to anticipate the range of strategies open to the company, and be proactive in developing his or her own strategies that could be put in place should the company move in a particular way. Such a process of having the IS strategy in accord with the corporate strategy is described as *strategic alignment*.

It is very important, therefore, that the IS manager be aware of what is going on in the world around him/her. This means monitoring and, through consultation, anticipating what the company is planning. In addition, the astute manager will study the nature of the competitive environment in which the company operates, and in particular the extent of the pressures on senior management and on the organization as a whole.

A Note on Terminology

As might be expected in a relatively new discipline, terms can be used quite loosely. ‘Information systems’ (IS) cover the whole range of business systems (for example, inventory control, payroll) that are run on an organization’s computers, from the large mainframes down to the PC. People also commonly refer to an organization’s MIS, or Management Information System. The acronym ‘MIS’, in current usage, tends to be confined to the organization’s formal information processing and reporting systems. But both terms can refer to the functional unit that develops and manages all the various types of information system in an organization. Thus we get the ‘IS department’ and the ‘IS Manager’, or the ‘MIS department’ and the ‘MIS Manager’.

IT stands for Information Technology, and strictly speaking refers to the combination of computers and communications systems technologies, as distinct from merely the computers. ‘Information technology’ is often shortened to ‘technology’, especially in organizations such as banks which process large amounts of information, and which have little in the way of non-computer technology. So managers talk of “investing in new technology”.

IT, however, is also used as an all-embracing term, as in “the strategic use of IT”, or “IT for competitive advantage”. In this usage, IT refers not only to the technology, but to the information systems associated with the technology, and

even the technology-related procedures that have been adopted as the result of the information systems.

As with IS, IT can also refer to the functional unit, or adjectivally, to describe an individual. So we hear of “our IT Department”, or encounter individuals titled ‘IT Manager’, or at a higher level where there are multiple divisions, the ‘IT Director’, or in some cases, ‘General Manager, Information Technology’. This latter position corresponds to the Vice-President Information Systems, which appears to be increasingly used in preference to the CIO (Chief Information Officer). The CIO usually has executive responsibility for the management of all corporate information, as well as an overview of the associated computer and communications technologies.

We have occasionally encountered a variant of the CIO, namely the IRM Manager (IRM = Information Resource Management). In fact ‘Information Management’ is sometimes used to denote the umbrella discipline of managing a firm’s information (computerized or otherwise), the corporate library, the telephone system, and underlying infrastructure of communications and network technologies. Thus IRM tends to be a functional activity, concerned with the overall management of a organization’s information policy, and in some cases the technology.

In this book we will attempt to be consistent. *Information systems* will generally refer to the systems themselves, while IS can usually be taken to mean the department or function. The IS manager thus manages the department and develops or acquires the information systems for the organization. *IT* is the conjunction of computers and communications technology. Occasionally, however, depending on the context, we will refer to IT as described earlier, as in “the strategic use of IT”, or “the IT direction”. We will also describe the CIO, or the IT Director, as the person who has responsibility for a number of IS departments in a large or diversified organization.

In broader terms, the designation “company”, “firm” and “business” will sometimes be used in lieu of “organization”, but in all cases will refer to any group of people striving to achieve the same set of goals. In some cases an alternative term is more appropriate; in others, it is to avoid repetition. However, the reader should be aware that much of what is covered in this book is applicable to the range of not-for-profit organizations, such as government agencies, hospitals and similar service organizations.

Ivan F. Jackson