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INFORMATION SYSTEMS

Chapter Summary

An Information System (IS) is defined as a *business application of the computer*. Information Systems are an essential part of the infrastructure of an organization.

Organizations have a central operational function: this could be maintaining bank accounts, selling groceries or making cars. Such complex operations are supported by equally complex IS, and these are mission-critical: if the IS fails, the company has to suspend its central operations. The organization also has many support functions, for example marketing and accounts – these too will be making use of IS.

The nature of IS and the essential role of IS in the organization is examined in the first part of this chapter. The second part of the chapter is an extended case study of the application of Information Systems in a large supermarket chain. The customer-facing end of the setup is the electronic point of sale (EPOS) system. The EPOS system not only adds up the bill but processes multibuys, card payments and loyalty cards. EPOS data then feeds into the regional warehouse and stock control functions. The supermarket branch needs to have the required stock at the right time, and it is the stock control IS that makes it happen. The regional warehouse also needs to have the right amount of stock. Replenishing the warehouse is an IS function and ordering from suppliers is done automatically using electronic data interchange (EDI) links. The supply chain is IS-controlled throughout, ensuring just-in-time availability.

Supermarkets' IS provision has enabled the introduction of online shopping – the e-Shop. Supermarkets can piggy-back their e-Shop services on their existing supply chain infrastructure in a bricks-and-clicks operation. The exception to this is Ocado, who compete using a pure-play e-Shop model.

The IS provision at the supermarket also encompasses the loyalty card scheme. This is a major source of marketing and management information. Each purchase by each loyalty card member is recorded and can be analysed for patterns that are fed back into marketing, store organization and merchandizing.

Important themes in IS include security, outsourcing and competitive advantages. These points are noted in this chapter and will be among the themes that will be highlighted throughout the rest of the book.

