

Chapter 6.1

IT Management in Small and Medium-Sized Enterprises

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INTRODUCTION

Computer-based information systems have grown in importance to SMEs, and are now being used increasingly to help them compete. For example, many SMEs have turned to the Internet to support their endeavours. Although the technology that is being used is relatively well understood, its effective management is not so well understood. A good understanding of IT management is important, as the management of IT is an attribute that has the potential to deliver a sustainable competitive advantage to a firm (Mata, Fuerst, & Barney, 1995). This article shows that there is no one accepted view of the term “IT management” for either large or small firms. However, the term “management” is often

considered to include the four functions of planning, organising, leading, and controlling. This framework has been applied to SMEs and specifically to their IT management. The article also shows that recent studies have shown significant links between IT management and both IT adoption and IT success. Resource-based theory is helping researchers gain a greater understanding of IT competences. These advances look likely to improve our understanding of the relationship between IT use and SME performance.

BACKGROUND

What is meant by the term “IT management”? There are three interrelated terms that are frequently used in the literature with respect to the management of

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Table 1. Different views of IT management in SMEs

IT Best Practices Cragg (2002)	IT Strategy and IT Structure Bergeron et al. (2004)	IT Management Sophistication Suraweera et al. (2005)	Information Management Issues Hicks et al. (2006)
Managers view IT as strategic Managers are enthusiastic about IT Managers explore new uses for IT New IT systems are customised Firms employ an IT specialist Staff have the skills to customise IS	IT environment scanning Strategic use of IT IT planning and control IT acquisition and implementation	IT planning IT leading IT controlling IT organising External expertise	Information exchange Implementation and customisation of IS Monitoring, control, and costing Information flow from customers and sales Information identification, location, and organisation Implementation and operation of quality systems Numbering and traceability of machines, assemblies, and parts Information availability and accessibility Information systems strategy and planning

computer-based technology: *IT Management*, *IS Management*, and *Information Management*.

Two of the terms, *Information Technology Management* and *Information Systems Management*, usually refer to the same phenomenon. These terms typically refer to managerial efforts associated with planning, organising, controlling, and directing the introduction and use of computer-based systems within an organisation. Also, we see little advantage in attempting to distinguish between information technology (IT) and information systems (IS). Thus, *IT management* and *IS management* refer to the same activities, that is, to the organisation's practices associated with planning, organising, controlling, and directing the introduction and use of IT within the organisation.

Table 1 provides examples of the concept of *IT management*, but before that we should clarify the term *Information Management*. This is a term which has frequently been used by authors to refer to two different but related activities. Some conceptualise information management as a process comprised of planning, organisation, and control of information resources (Earl, 1989). Thus Earl's *information management* is the same as IT

management, as described above. However, other authors use the term *information management* to recognise that organisations have *information* that needs to be managed as a resource (e.g., Hicks, Culley, & McMahon, 2006). We argue that this view of *information management* is an important subset of IT management, as "IT management" as a broader term recognises that an organisation has to manage information, as well as hardware, software, people, and processes.

This characterisation of IT management is in agreement with the definition of "management" described in classical management literature, expressed as a process of four functions, namely planning, organising, leading, and controlling (Schermerhorn, 2004).

- **Planning:** determining what is to be achieved, setting goals, and identifying appropriate action steps;
- **Organising:** allocating and arranging human and material resources in appropriate combinations to implement plans;
- **Leading:** guiding the work efforts of other people in directions appropriate to action plans; and

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