Chapter 8.12
Information Technology Service Management and Opportunities for Information Systems Curricula

Sue Conger
University of Dallas, USA

ABSTRACT

Historically, information systems (IS) programs have taught two of the three areas of information technology (IT) management: strategy and management, and applications development. Academic programs have ignored the third area, IT operations. IT operations management is becoming increasingly important as it is recognized as consuming as much as 90% of the IT budget and as acquisition of software becomes more prevalent than development of custom applications. Along with the shift of management focus to IT operations, standards such as the IT infrastructure library (ITIL) have been adopted by businesses to guide the development of processes for IT operations that facilitate evolution to IT service management. This shift to servitizing IT management, creates an opportunity for IS programs to align with business practices by innovating in the teaching of IT service management. Several methods of incorporating ITSM material into educational programs are explored. [Article copies are available for purchase from InfoSci-on-Demand.com]

INTRODUCTION

With increasing frequency, disruptive technology-related innovations cause a paradigm shift in IT practice and management. In the 1950s and 1960s, methodologies codified best practices in application development for analyzing and computerizing complex processes (De Marco, 1979; Yourdon, 1988). Subsequent generations of methodologies

evolved to include data orientation, then object orientation, and most recently, event orientation. Relational database technology, introduced by Codd and Date, similarly disrupted data management in the 1970s (Codd, 1970; Date, 1999). The development of personal computers disrupted both industry and academia in the 1980s. Object orientation changed methods of teaching application development and programming in the 1990s (Jacobson et al., 1998). The Internet changed business conduct beginning with its privatization in 1993 but accelerating with technology maturity in the late 1990s and early 2000s. This decade is witnessing two disruptions relating to the servitizing of IT organizations, one technical in the form of service-oriented architecture (SOA) (Durvasula et al., 2008), and one process and management oriented in the form of IT Service Management (ITSM) (itSMF, 2007).

This article addresses the changes in the conduct of IT in business and the related need for academic programs to address those changes. Alternative approaches for developing academic programs are presented and discussed.

THE CONDUCT OF IT IN BUSINESS

In the last century, Information Technology (IT) and the Chief Information Office (CIO) often were separated from the business strategy-development team. Business strategy was developed and possibly discussed with the CIO, who developed an IT strategy, to the extent possible, that fit the business strategy. Enlightened organizations might allow the CIO to sit in the meetings so the later discussion was circumvented. Enlightened organizations might also conduct their critical decision making to prioritize and select projects for development or acquisition through an IT steering committee comprised of the CIO plus other executives who represented critical stakeholders to the decision process (cf. King, 1985). The outcome of a successful matching exercise should align the business and the IT strategy.

IT in Business: The Academic View

More recently, the need for more seamless integration of business and IT strategies has been described (Weill & Ross, 2004). Under the newer scheme, IT moves away from responding to single requests in a never-ending queue toward architecture-driven IT decisions that ensure improved organizational support and, eventually, improved organizational response to changing environmental conditions (Ross et al., 2006; Broadbent & Kitzis, 2005; Ross et al., 2006). Under these more recent schemes, the responsibility for alignment is shared between the C-level executives and the CIO, with successful organizations being those that most closely align IT with business strategy. However, alignment activities apply to matching applications to strategy and does not extend to operations, help desk, or other types of services.

One key issue in these writings and others like them is that the prescriptions give little guidance on how to actually conduct business within the IT department that mirrors and fulfills the alignment objectives decided. Frameworks, such as the IT Infrastructure Library (ITIL), Control Objectives for Information and related Technology (CobiT) or the Capability Maturity Model - Integrated (CMMI) might be alluded to with an implicit assumption that their application will provide the needed IT discipline for IT organizations to act as desired (SEI, 2006; ITGI, 2007; OGC, 2008).

These ways of thinking, rather than avoiding the issues of IT management, either assume that the important actions take place in the decision process or that day to day operation of the IT organization is not relevant to discussions of strategy. Further, books and academic programs that *do* address daily functioning of IT focus on applications development, such as object orientation, or technology, such as telecommunications with little regard to how they are configured and managed in a production environment.