Chapter 12
IT Service Management Standards:
Education Challenges

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ABSTRACT

Service management standards such as the IT Infrastructure Library (ITIL), and now ISO/IEC 20000, provide guidance and tools for effective management and control of IT service delivery. These standards are of increasing importance to organisations around the globe so education about these standards and possibilities for training of IT staff are important. In the main, academics and Universities have not embraced these standards in either research or education about them; however, demand for IT staff qualified to various levels in these standards grows. Universities have a place in this education process and there are significant benefits to them, the graduates and industry in terms of increases in student numbers, enhanced employment opportunities and improvement in service quality, but there are challenges also especially in relating problems in practice to students. Using results from two national surveys and several case studies, this chapter considers the requirements for education about these important standards.

INTRODUCTION

In recent years, a quiet revolution has occurred in IT service management. Over the last 20 years, the ITIL phenomenon has spread from the UK government data centres to the IT departments of private and public organisations around the world. With the evolution of ITIL from a ‘company’ standard to its ratification in December 2005 by the International Organisation for Standardization (ISO) as an international standard (ISO/IEC 20000), growth in its adoption has accelerated. As at January 2009, there are 318 organisations spread over almost 40 countries certified to the standard (itSMF, 2008).

IT service managers are responsible for an increasingly diverse and crucial infrastructure. They are under pressure to reduce costs while helping the organisation generate revenue, and to provide fast,
cost effective service to their customers. Over the last few years, many organisations have adopted the IT infrastructure library (ITIL) to provide effective management and control of IT service delivery and support. The ITIL best practice framework enables managers to document, audit, and improve their IT service management processes.

An important feature of ITIL which has facilitated its acceptance is the internationally recognised certification of accredited ITIL training courses. Today, many consulting firms offer ITIL training in response to the demand for ITIL certified staff. Despite this sweeping adoption by industry, most academic institutions appear to be reluctant to include ITIL in their IT curriculum. Accompanying this is a general lack of interest by information systems researchers in ITIL adoption, as noted by Venkataraman and Conger: “The best practice processes and principles that are part of ITIL: Service Management, Service Delivery, Applications Management, etc. are very much in-line with the teaching objectives of MIS departments. Despite this, however, the level of understanding and interest of ITIL in academia, both on the research and teaching dimensions, significantly lags industry activity” (2006). There are exceptions, such as the research effort led by Cater-Steel (Cater-Steel, 2009; Cater-Steel & McBride, 2007; Cater-Steel & Pollard, 2008; Cater-Steel, Tan, & Toleman, 2006; Cater-Steel & Toleman, 2007a, 2007b, 2009; Cater-Steel, Toleman, & Tan, 2006; Iden, 2009; Praeg & Spath, 2009; Tan, Cater-Steel, Toleman, & Seaniger, 2007), Hochstein, Tamm and Brenner (2005), Niessink and van Vliet (1998), Potgieter, Botha and Lew (2005), Praeg and Schnabel (2006), Praeg & Spath (2009), and Iden (Iden, 2009), all of whom have undertaken empirical research into the ITIL phenomenon.

There have been recent attempts to raise general awareness of the need for education on standardization (Purcell, 2006). In particular, communities engaged in vocational training and university education are urged to recognise their important role, alongside business and government, in ensuring that standardization is effective and practical. “Their specialized knowledge can form a vital contribution to standards development, while integrating the principles of standardization into the curricula allows students to carry them forward into the workplace: an investment in the future” (BSI Education, 2006).

Standardization and certification are two separate issues, but are often confused (Kruithof & Ryall, 1994). Many IT service departments adopt standards to improve service, consistency of performance, and productivity. These standards are sometimes developed in-house, or adapted from vendor, national or international standards. Standards adoption may be motivated by a corporate compliance or improvement program, or undertaken as a separate exercise within the IT department.

Depending on the standard, certification by a third party may apply to individuals, as is the case of ITIL qualifications, or apply to an organisational unit, for example subsequent to an ISO/IEC 20000 audit.

A recent survey of Human Resources (HR) managers and IT employees in the United States found strong evidence of the increasing acceptance, prevalence and benefits of certification of IT staff in business and industry (Wonacott, 2003). The US study focussed on certificates awarded by vendor organisations such as Microsoft and Cisco, as well as professional associations such as the Project Management Institute and the American Institute of Certified Public Accountants. The HR executives and IT employees reported that certificates related to IT education were of great benefit in the recruitment and job application process; both felt that an IT certificate was a clear signal of not only specific IT knowledge and skills, but also of desirable motivation and attitude (Wonacott, 2003).

The objective of this paper is to describe the evolution of ITIL from a company standard to international standard, and to consider the growing