

## Chapter XVII

# Education for IT Service Management Standards

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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 the effective management and control of IT service delivery. These standards are of increasing importance to organizations around the globe. Education about these standards and possibilities for training IT staff are, therefore, important. Universities have a place in this education process; however, academics have not embraced these standards in either research or education about them. Regardless, demand grows for IT staff qualified at various levels, particularly on basic or foundational levels, in these standards. This article considers the training offered and the requirement for education related to IT service management. Benefits to universities, graduates, and industry are numerous including increases in student numbers, enhanced employment options for graduates, and improved

IT service quality, but there are challenges too, in particular, how to effectively transfer the knowledge to students who have not experienced the IT service environment firsthand.

### INTRODUCTION

IT service managers are responsible for an increasingly diverse and crucial infrastructure. They are under pressure to reduce costs while helping the organization generate revenue, and to provide fast, cost-effective service to their customers. Over the last few years, many organizations have adopted the IT Infrastructure Library (ITIL) to provide the 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 in response to business requirements.

In recent years, a quiet revolution has occurred in IT service management as the ITIL phenomenon has spread from the U.K. government data centers to the IT departments of organizations around the world. With the evolution of ITIL from a company standard to its ratification in December 2005 by the International Organization for Standardization (ISO) as an international standard (ISO/IEC [International Electrotechnical Commission] 20000), growth in its adoption is guaranteed to accelerate.

An important feature of ITIL that has facilitated its acceptance is the internationally recognized certification of 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 reticent in including IT service management in their IT curriculum (Watson, Pitt, & Kavan, 1998). In fact, there is very little academic research related to ITIL adoption, the exceptions being Hochstein, Tamm, and Brenner (2005), Potgieter, Botha, and Lew (2005), Niessink and van Vliet (1998, 2000), and Praeg and Schnabel (2006). It is not surprising that little academic research exists as it has been noted that company standards have been neglected in standardization research (Vries, Slob, & Zuid-Holland, 2006). Furthermore, the only academic research related to ITIL education is that published by Bentley (2006) and Jovanovic, Bentley, Stein, and Nikakis (2006).

The objective of this article is to describe the evolution of ITIL from a company standard to international standard, and to consider the growing need for training and the possible role of universities in providing education to assist students in gaining certification related to IT service management.

The article is structured as follows. First, the methodology used to gather evidence is described. Then a detailed explanation is provided of the ITIL framework, its origins, its evolution to an international standard, and its growth in

adoption. The current ITIL training schemes are evaluated and the role of universities in improving education related to IT service management is then discussed. In the final conclusions section, suggestions are made for further research.

## **METHODOLOGY**

As well as reviewing recent literature on ITIL adoption and training, the authors have conducted two surveys and six case studies of ITIL adoption with IT service managers. The analysis is based on the data gained from these sources. The case studies used structured interviews based on an instrument developed by Hochstein et al. (2005). Structured interviews were conducted with the managers of ITIL implementation projects in six large organizations between March and September 2006. The organizations were selected on the basis of their response to a survey that was conducted at the IT Service Management Forum (itSMF) Australian national conferences in 2005 and 2006. These six case studies complement the survey data and enable both a broad view of the phenomenon as a whole and a richer, more detailed picture of a few organizations. The interviews were recorded and transcribed, checked by the researchers, and confirmed by the interviewees as a valid record of the interviews.

## **IT SERVICE MANAGEMENT STANDARDS**

### **Evolution of ITIL to International Standard**

In response to the serious economic downturn in the late 1980s, the Central Computer and Telecommunications Agency (CCTA) in the United Kingdom developed the Government Information Technology Infrastructure Management framework to reduce costs and better manage

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