

# Chapter XXIII

## Measuring Return on Investment from Implementing ITIL: A Review of the Literature

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### ABSTRACT

*This study reviews literature related to financial metrics that organizations could use in measuring the return on investment from their adoption of the IT Infrastructure Library (ITIL) framework. ITIL outlines an extensive set of best practices for IT service management in organizations but as yet there is limited academic research on measuring the return on investment from ITIL adoption. This review considers appropriate metrics which service managers could use to build a business case for ITIL adoption, or ongoing ITIL projects.*

### INTRODUCTION

The Information Technology Infrastructure Library (ITIL) framework outlines an extensive set of best practices for IT service management in organizations but as yet there is limited academic research on measuring the return on investment

from ITIL adoption. After all, business organizations are most interested in the financial return that investment in ITIL could bring to their organization.

This literature review is organized in five sections. The first section describes the literature review method. The second section provides a

brief description of the ITIL framework. The third section discusses the importance of measuring return on investment in ITIL. The fourth section discusses some of the available measurement metrics for IT investment that could be adapted to this study. The fifth section discusses a proposed measurement model and metrics for measuring investment return on ITIL service management.

## **LITERATURE REVIEW METHOD**

This systematic literature review was conducted in four phases. The first phase involved the identification of relevant keywords for this study. The initial keywords were identified through ITIL literature and more keywords were added as more literature was reviewed. The second phase involved searching in online academic libraries for documents that contains the keywords. Four online academic libraries were used in this study: ACM Digital library, EBSCOHost, Emerald Insight and IEEEExplore. The focus of the review was on publications during the time period from 2000 to 2006 although some prior studies were also included. The third phase saw the classification of the literature according to keywords. A single research article may appear in more than one keyword category. Appendix A contains a summary of the research articles and keywords. The fourth phase comprised a systematic analysis of the literature based on the keywords. The analysis extracts the research objective, research method and measurement variables, and is summarized in Appendix B.

## **ITIL SERVICE MANAGEMENT FRAMEWORK**

The purpose of ITIL as a framework of best practice is to facilitate the delivery of high quality

information technology services. ITIL outlines an extensive set of management procedures that are intended to support businesses in achieving both quality and value for money in IT operations. ITIL is built around a process-model based view of controlling and managing operations. ITIL version 2 contains a subsection entitled IT service management and the subsection is further divided into service support and service delivery.

ITIL makes a distinction between *users* and *customers*: customers are the people in an organization who commission and fund the IT services whereas users are those who use the services on a day-to-day basis. Service support defines six processes that ensure *users* have sufficient access to support business function (OGC, 2002b):

1. **Configuration management:** Provides a logical model of the infrastructure by identifying, controlling, maintaining and verifying the versions of all components.
2. **Change management:** Responsible for ensuring changes are evaluated, approved, controlled, tracked and implemented safely without side effects to the quality of the service itself.
3. **Release management:** Undertakes the planning, design, building, configuration and testing of hardware and software to create a set of release components for a live environment.
4. **Incident management:** Restores normal service operation as quickly as possible and minimizes the adverse impact on business operation.
5. **Problem management:** Reduces both the number and severity of incidents and problems within business to proactively prevent recurrence of incidents and problems.
6. **Service desk:** Receipt and resolution of service requests, technical guidance, communication, etc. The central contact point between users and IT staff.

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