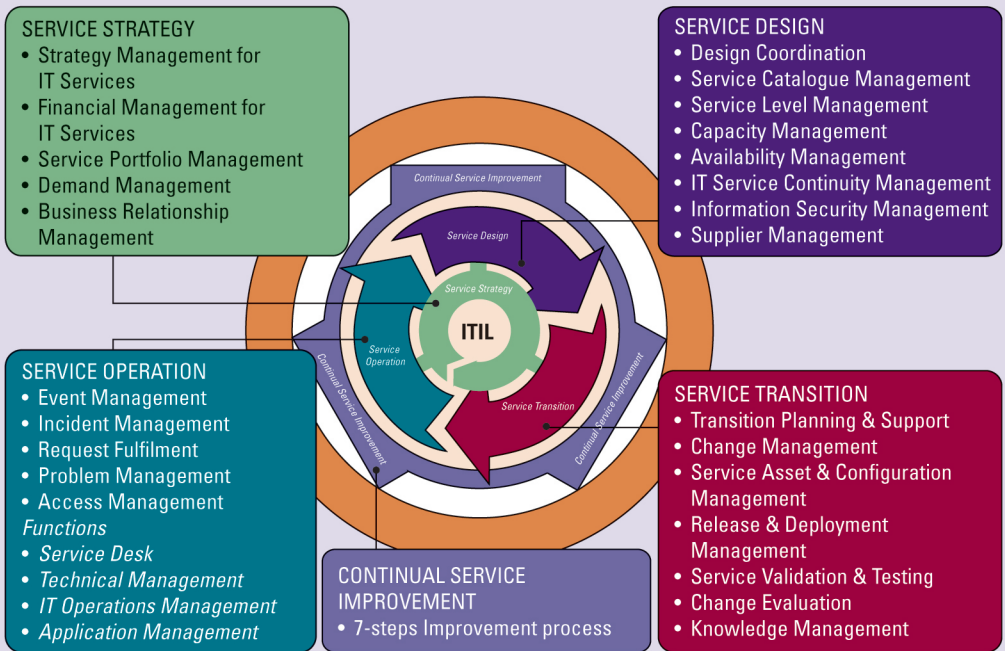


## IT Service Management Based on ITIL® 2011 Edition



Pierre Bernard



IT Service Management based on ITIL® 2011 Edition

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# **IT Service Management based on ITIL® 2011 Edition**



# Colophon

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# Foreword

The aim of this book is to provide an easy to read and easy to use introduction to the broad library of ITIL core books and to support the understanding and the further distribution of ITIL as a popular industry framework. The previous editions of this book, based on ITIL V2 and ITIL V3, have gained a worldwide reputation as an easy access training aid, used by many IT professionals as study guidance for the ITIL Foundation and ITIL Intermediate (lifecycle and capability) exams. This book is a certainly a true successor, aiming at the same target groups.

Van Haren Publishing has been publishing supporting material on ITIL since 2002 and have been very fortunate in gaining the expertise and support of many global industry experts in authoring and reviewing the material. Over this period ITIL has developed from a set of simple processes into a framework that reflects the increasing trends for organizations to work within large enterprise environments across national borders. However it is also clear that many of our readers fall into either of the following two broad categories: those starting their careers within IT service management and those involved with the execution of processes. For these readers simple, concise overviews and explanations of the elements of the framework will be the most useful. Introductory books are very useful as reference material. In addition many organizations use multiple frameworks and methods and thus, there is a requirement for colleagues in other disciplines to understand the basics of ITIL and how it might affect and support their own operations.

**Looking forward:** There is no “one-size-fits-all framework” or “the mother of all methods”. Organizations around the world will continue to adopt newer technologies and service offering such as mobile computing and cloud-based services. Therefore it is paramount for the success of the IT organizations that they adopt and adapt the various elements of ITIL and other frameworks and methods to suit their innovative solutions. This title celebrates the ‘select and integrate’ approach of many around the world by presenting ITIL elements in succinct, discrete packages.

The continued publication of up-to-date material that covers the key elements of the ITIL Lifecycle approach is therefore very welcome. Like previous editions, this title benefits from the wisdom and support of many colleagues within the IT service management industry and we believe that it presents a strong, quality piece of text that will continue to prove extremely useful to students, executives and managers alike.

**Acknowledgements:** The format of the content of this book is based on the Dutch edition that was edited by René Visser. The role of René for improving the consistency of the text was very important to realize this English language edition.

September 2014,  
Pierre Bernard

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# 1

## Introduction

### ■ 1.1 BACKGROUND

Since the year 2000, technological developments such as smartphones, tablets, cloud services, near-field-content, Wi-Fi, and especially social media have had a tremendous effect on the world we live in. With the emergence of extremely powerful hardware, highly versatile software and super-fast networks – and their wide-spread acceptance and use – organizations worldwide have been able to develop their information-dependent products and services to a greater extent, and to bring them to the market much faster. These, as well as many other socio-economic and political developments have marked the superimposition of the **information age** upon the industrial age. In this “*information age*”, where everything is connected, the dissemination of data and information has become faster and more dynamic as well as a worldwide phenomenon.

Quoting from one of Bob Dylan's<sup>1</sup> songs titled “*The Times They Are A-Changin*” is quite appropriate here as indeed the traditional view and role of the Information Technology organization (IT) are dramatically altered based on the above. To be successful, organizations will need to be as nimble as possible in order to react to rapidly changing market demands and technologies. First, there is a movement concerning renaming IT to Information Services (IS). Second, cloud computing is becoming a more viable option and a more common solution. This is a result of organizations realizing that technology is not always one of their core competences and that outsourcing provides them with a more accurate and predictable cost structure.

Organizations should also start considering the significant impact of the arrival in the workplace of extremely technology-savvy employees. These new employees have been using technology almost since birth; they are not only the early adopters of mobile technologies but of social media as well. Information is now at their fingertips and they will expect the same in the workplace. In addition to this new generation of employees,

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1 Bob Dylan – American singer, songwriter, musician (1941 - )

organizations need to consider how they will handle the same demands from their existing and potential customers.

There are numerous books, whitepapers, and articles<sup>2</sup> about the need to break down vertical business silos and shift the business model to more horizontal **processes**, thus “*flattening*” the organization. The authors of these documents are advocating that decision-making powers should be increasingly bestowed on the employees. Again, according to these various sources, an important advantage of process-oriented organizations is that processes can be designed to support a **customer-oriented approach**. This has made the alignment between the IT organization (responsible for supplying information) and the customer (responsible for using these information systems in their business) increasingly significant. This is usually known as **Business-IT Alignment (BITA)**.

It is against this background that the world of IT Service Management (ITSM) has arisen and gained in popularity.

The above authors are not wrong, nor are they lacking vision; on the contrary. As organizations gained more experience with the **process-oriented approach** of ITSM, it became clear that these processes must be managed coherently. Moreover, it became obvious that the introduction of a process-oriented work method meant a major change for organizations that were primarily line and project-oriented. Culture and change management are crucial elements for a successful organizational design. Change management here refers to business change, as well as changes in attitudes, aptitudes, behaviors, the adoption of frameworks and methodologies adapted to suit the organizational needs.

The truth about processes and BITA is that organizations have always used processes and IT has always been part of the organization. However, we must acknowledge that processes are often conducted in isolation by a few individuals or groups. Processes are often neither shared nor documented. One of the causes for the above is that many people believe that “*knowledge is power*”<sup>3</sup>, as illustrated in the following two quotes:

*Knowledge is power. Information is liberating. Education is the premise of progress, in every society, in every family.*

- Kofi Annan

*Knowledge is power. Information is power. The secreting or hoarding of knowledge or information may be an act of tyranny camouflaged as humility.*

- Robin Morgan

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<sup>2</sup> See Appendix A for some examples

<sup>3</sup> Attributed to Sir Frances Bacon (Viscount of Saint Alban, 1561 – 1626)

In the author's opinion, "*knowledge sharing is power*".

Another important lesson learned was that the IT organization must not lose itself in a process culture. Just like the one-sided project-oriented organization, a one-sided process-oriented organization was not the optimum type of business. Balance was, as always, the magic word. In addition, it became clear that the customer-oriented approach required that an **end-to-end** and **user-centric** approach must be followed: it was of no help to the user to know that "*the server was still in operation*" if the information system was not available at the user's workplace. IT services must be viewed in a larger context. The need for the recognition of the **Service Lifecycle**, and the management of IT services in light of that lifecycle, became a concern.

Due to the fast growing dependency of business upon information, the quality of information services in companies is being increasingly subjected to stricter **internal and external requirements**. The role of **standards** is becoming more and more important, and **frameworks** of "*best practices*" help with the development of a management system to meet these requirements. Organizations that are not in control of their processes will not be able to realize great results on the level of the Service Lifecycle and the end-to-end-management of those services. Organizations that do not have their internal organization in order will also not achieve great results. For these reasons, all these aspects are handled alongside each other in the course of this book.

## ■ 1.2 WHY THIS BOOK

This book has been developed for all those responsible for setting up and delivering the information services. Additionally, it contains a lot of useful information for those who are responsible for strategic information issues. This is supported by both the description of the Service Lifecycle, as documented in ITIL and by the description of the processes that are associated with it. The ITIL core books are very extensive: almost 2000 pages. These ITIL core books can be used for a thorough study of contemporary best practices of ITSM. This book provides the reader with an easy-to-read comprehensive introduction to the broad library of ITIL core books. And finally, the contents of this book cover the specifications for the ITIL Foundation exam from AXELOS; this book has proven useful in preparing for this exam.

In 2007 Version 3 of the ITIL framework was published. This version offered a new concept or ITSM. Additional to the processes approach the concept of the lifecycle approach was introduced with ITIL V3. In 2011 a second edition of ITIL V3 was published. This new ITIL 2011 Edition is comprised mostly of cosmetic, grammatical, and syntactic modifications.

ITIL offers a systematic approach to the delivery of quality of IT services. It provides a detailed description of most of the important processes for an IT organization, and includes information about procedures, tasks, roles, and responsibilities. These can be used as a basis for tailoring the framework to the needs of individual organizations.

Over the years, ITIL has become much more than a series of useful books about ITSM. The framework for the “*best practice*” in ITSM is promoted and further developed and influenced by advisors, educators, trainers, and suppliers. These suppliers include a wide variety of technological solutions such as hardware, software, and cloud computing products. Since the 1990s, ITIL has grown from a theoretical framework to the de facto approach and philosophy shared by the people who work with it in practice.

Being an extended framework of best practices for ITSM itself, the advantages and disadvantages of frameworks in general, described in Section 2.6, are also applicable to ITIL. Of course, ITIL was developed because of the advantages mentioned earlier. Many of the pointers from “*best practices*” are intended to avoid potential problems or, if they do occur after all, to solve them.

### ITIL examinations

For the new 2011 Edition of ITIL, the syllabuses for all qualifications have been updated. The most significant changes relate to new/modified section numbers as well as improved wording and/or clarification for some learning objectives and section details.

At the publication date of this book, well over 2 million people worldwide have achieved one or more levels of ITIL certification.

There are four qualification levels relating to the ITIL framework. They are:

- Foundation Level
- Intermediate Level (Lifecycle Stream & Capability Stream)
- ITIL Expert
- ITIL Master

For more information about the ITIL V3 Qualification Scheme, please visit <http://www.ital-officialsite.com>.

## ■ 1.3 ORGANIZATIONS INVOLVED IN ITIL

### Cabinet Office and AXELOS

Initially ITIL was a product of CCTA, a UK government organization. In 2001 CCTA was incorporated by the Office of Government Commerce (OGC) who became the new owner of ITIL. As a result, the UK Government became the owner of the Intellectual

Property Rights (IPR), including the copyrights and trademark rights, of ITIL. Since June 2010 the operational and control tasks were in the hands of the Cabinet Office.

On 1 July 2013 a new organization was created for the further development and exploitation of ITIL and the PPM portfolio (including PRINCE2): AXELOS. This Limited company is a joint venture of the Cabinet Office and Capita PLC. As a result, this joint venture became the new owner of ITIL and the PPM portfolio. The UK government holds 49 percent of the shares of AXELOS while Capita PLC holds the remaining 51 percent.

### **itSMF**

The target group for this publication is anyone who is involved or interested in ITSM. A professional organization, working on the development of the ITSM field, has been created especially for this target group.

In 1991 the Information Technology Service Management Forum (*itSMF*), originally known as the Information Technology Infrastructure Management Forum (ITIMF), was set up as a UK association. In 1994, a sister-association was established in the Netherlands, following the UK example. Since then, independent *itSMF* organizations have been set up in nearly fifty countries, spread across the globe, and the number of “*chapters*” continues to grow. All *itSMF* organizations operate under the umbrella organization, *itSMF International (itSMF-I)*.

The *itSMF* is aimed at the entire professional area of ITSM. It promotes the exchange of information and experiences that IT organizations can use to improve their service provision. The *itSMF* is also involved in the use and quality of the various standards and methods that are important in the field. One of these is ITIL. The *itSMF-I* contributes to the promotion of the role of ITIL.

### **Certification, examination, and accreditation**

AXELOS is responsible for managing the ITIL copyrights, the certification of the ITIL examinations and the accreditation of examination institutes. AXELOS is also responsible for the publication of the ITIL certification system and for the official ITIL publications (manuals).

In 2014 AXELOS has accredited seven Exam Institutes (EIs) for the distribution around the globe of the ITIL exams:

- BCS-ISEB CERT-IT,
- CSME, DANSK IT,
- DF Certifiering AB,
- EXIN,
- LCS (Loyalist Certification Services),



- PEOPLECERT Group,
- TÜV SÜD Akademie.

For more information, see [www.itil-officialsite.com](http://www.itil-officialsite.com).

## ■ 1.4 DIFFERENCES FROM PREVIOUS EDITIONS

Previous editions of this book have played a key role in the distribution of ideas on ITSM and ITIL for many years. The title has been translated into thirteen languages and is recognized as the most practical introduction to the leading “*best practices*” in this field. Earlier editions of this book focused on the content of three books from the ITIL series (Version 2): Service Support, Service Delivery, and Security Management, and placed them in a broader context of quality management.

The main difference between ITIL Version 2 and 3 lies in the Service Lifecycle, introduced in Version 3. Where the scope of Version 2 focused on single practices, clustered in Delivery, Support, and Security Management, the scope in Version 3 takes the entire Service Lifecycle into account.

## ■ 1.5 STRUCTURE OF THIS BOOK

This book starts with an introduction on the backgrounds and general principles of ITSM and the context for ITIL (**Chapter 1**). It describes the parties involved in the development of best practices and standards for ITSM, and the basic premises and standards that are used.

The body of the book is set up in two large parts: **Part 1** deals with the Service Lifecycle and the four functions in ITIL, **Part 2** deals with the individual processes that are described in ITIL.

**Part 1**, consisting of **Chapters 2 and 3**, introduces the Service Lifecycle, in the context of ITSM and IT Governance. It discusses principles of organizational maturity, and the benefits and risks of following a service management framework. The section introduces and discusses the functions involved in service management good practices. This enables the reader to better relate the processes in Part 2, and their related concepts and activities, back to the “*people aspect*” of ITSM.

In **Part 2**, consisting of **Chapters 4 to 8**, each of the phases in the Service Lifecycle are discussed in detail, following the structure of the ITIL core books: Service Strategy, Service Design, Service Transition, Service Operation, and Continual Service Improvement.

These chapters provide a detailed view on the characteristics of the Service Lifecycle, its structure and its elements. The main points of each phase are presented in a consistent way to aid readability and clarity.

Each of these processes is described in an identical manner, in terms of:

1. Introduction (containing: Goal, Objectives, Scope, Value for the business)
2. Activities, methods and techniques
3. Management information
4. Interfaces
5. Triggers
6. Inputs
7. Outputs
8. Critical Success Factors
9. Metrics
10. Challenges
11. Risks

The **Appendices** provide useful sources for the reader. Appendix A is a reference list of the sources used in this book is provided. Appendix B offers an overview of the most important differences between ITIL V3 (2007) and ITIL 2011 Edition.

## ■ 1.6 HOW TO USE THIS BOOK

Readers who are primarily interested in the Service Lifecycle can focus on Part 1 of the book, and pick whatever they need on functions and processes from Part 2.

Readers who are primarily interested in the functions and processes and are not ready for a lifecycle approach yet, or who prefer a process approach, can read the introductory chapters, and then focus on the functions and processes of their interest.

Readers who want a thorough introduction to ITIL, exploring its scope and main characteristics, can read Part 1 on the Lifecycle, and add as many of the processes from Part 2 as required.

This book aims to provide support to a variety of approaches to ITSM based on ITIL.

This book covers all exams specs for the ITIL Foundation exam and is therefore a useful tool when preparing for this exam. However, this book covers more subjects than the exam specs. If a reader intends to study only the subject of the exam specs, he should best rely on the Preparation Guide (ITIL Foundation Syllabus), available through:

<http://www.itil-officialsite.com/Qualifications/ITILQualificationLevels/ITILFoundation.aspx>.

Additionally this book offers a useful support when preparing for the ITIL Intermediate examination (lifecycle and capability exams).

The official ITIL Glossary, the official list of all ITIL terminology, is available via the product page for this book on [www.vanharen.net](http://www.vanharen.net).

**PART**

**1**

**THE ITIL SERVICE  
LIFECYCLE**

