# Contents

# 1 Introduction

This publication provides best-practice advice and guidance on all aspects of managing the day-to-day operation of an organization's information technology (IT) services. It covers issues relating to the people, processes, infrastructure technology and relationships necessary to ensure the high-quality, cost-effective provision of IT service necessary to meet business needs.

The advent of new technology and the now blurred lines between the traditional technology silos of hardware, networks, telephony and software applications management mean that an updated approach to managing service operations is needed. Organizations are increasingly likely to consider different ways of providing their IT at optimum cost and flexibility, with the introduction of utility IT, pay-per-use IT Services, virtual IT provision, dynamic capacity and Adaptive Enterprise computing, as well as task-sourcing and outsourcing options.

These alternatives have led to a myriad of IT business relationships, both internally and externally, that have increased in complexity as much as the technologies being managed have. Business dependency on these complex relationships is increasingly critical to survival and prosperity.

## 1.1 OVERVIEW

Service Operation is the phase in the ITSM Lifecycle that is responsible for 'business-as-usual' activities.

Service Operation can be viewed as the 'factory' of IT. This implies a closer focus on the day-to-day activities and infrastructure that are used to deliver services. However, this publication is based on the understanding that the overriding purpose of Service Operation is to deliver and support services. Management of the infrastructure and the operational activities must always support this purpose.

Well planned and implemented processes will be to no avail if the day-to-day operation of those processes is not properly conducted, controlled and managed. Nor will service improvements be possible if day-to-day activities to monitor performance, assess metrics and gather data are not systematically conducted during Service Operation.

Service Operation staff should have in place processes and support tools to allow them to have an overall view of Service Operation and delivery (rather than just the separate components, such as hardware, software applications and networks, that make up the end-to-end service from a business perspective) and to detect any threats or failures to service quality.

As services may be provided, in whole or in part, by one or more partner/supplier organizations, the Service Operation view of end-to-end service must be extended to encompass external aspects of service provision – and where necessary shared or interfacing processes and tools are needed to manage cross-organizational workflows.

Service Operation is neither an organizational unit nor a single process – but it does include several functions and many processes and activities, which are described in Chapters 4, 5 and 6.

## 1.2 CONTEXT

### 1.2.1 Service Management

IT is a commonly used term that changes meaning with context. From the first perspective, IT systems, applications and infrastructure are components or sub-assemblies of a larger product. They enable or are embedded in processes and services. From the second perspective, IT is an organization with its own set of capabilities and resources. IT organizations can be of various types such as business functions, shared services units and enterprise-level core units.

From the third perspective, IT is a category of services utilized by business. They are typically IT applications and infrastructure that are packaged and offered as services by internal IT organizations or external service providers. IT costs are treated as business expenses. From the fourth perspective, IT is a category of business assets that provide a stream of benefits for their owners, including, but not limited to, revenue, income and profit. IT costs are treated as investments.

### 1.2.2 Good practice in the public domain

Organizations operate in dynamic environments with the need to learn and adapt. There is a need to improve performance while managing trade-offs. Under similar pressure, customers seek advantage from service providers. They pursue sourcing strategies that best serve their own business interest. In many countries, government agencies and non-profit-making enterprises have a similar propensity to outsource for the sake of

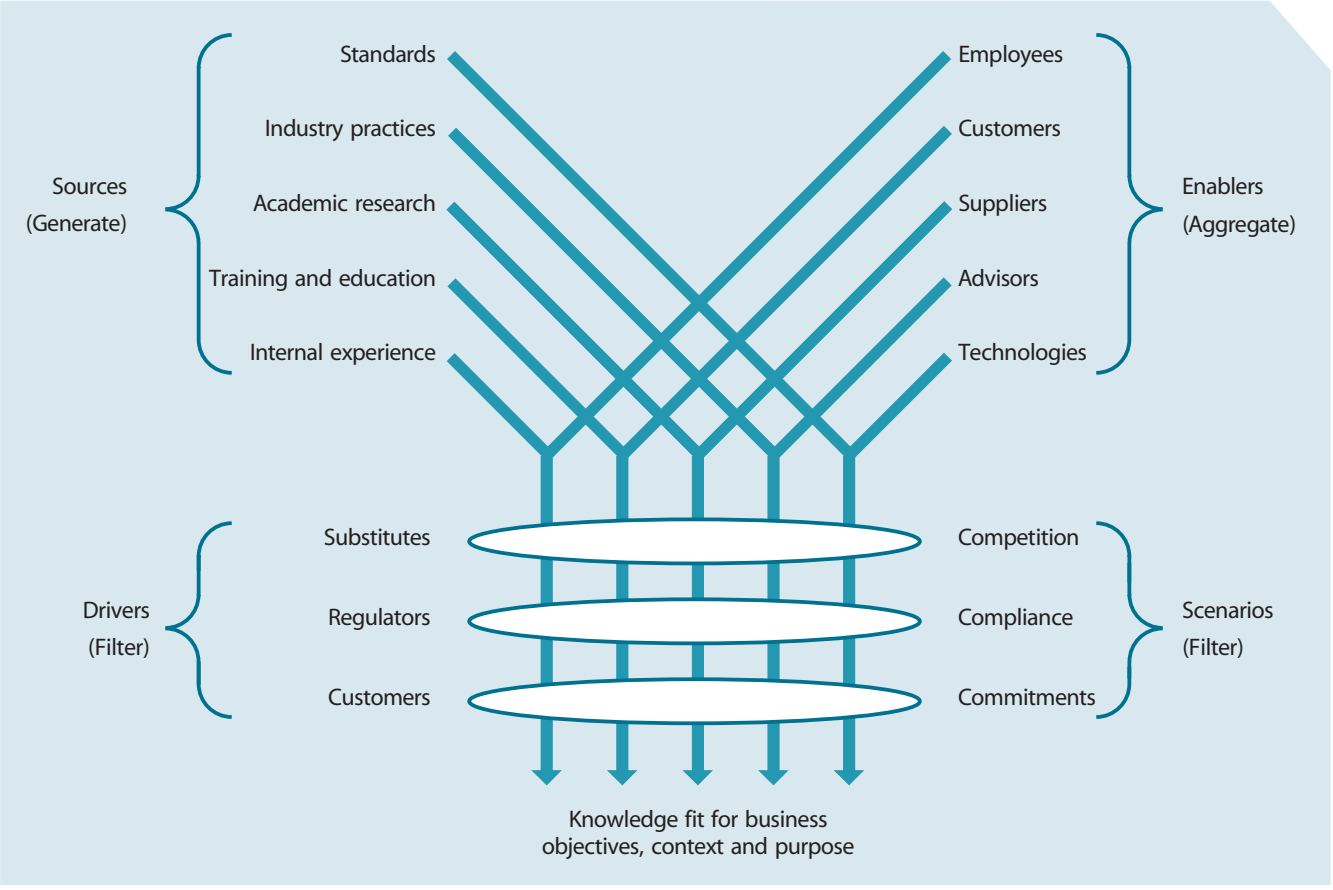


***Figure 1.1 Source of Service Management Practice***

operational effectiveness. This puts additional pressure on service providers to maintain a competitive advantage with regard to the alternatives that customers may have. The increase in outsourcing has particularly exposed internal service providers to unusual competition.

To cope with the pressure, organizations benchmark themselves against peers and seek to close gaps in capabilities. One way to close such gaps is the adoption of good practices across the industry. There are several sources for good practices, including public frameworks, standards and the proprietary knowledge of organizations and individuals (see Figure 1.1).

Public frameworks and standards are attractive when compared with proprietary knowledge:

- Proprietary knowledge is deeply embedded in organizations and therefore difficult to adopt, replicate or transfer, even with the cooperation of the owners. Such knowledge is often in the form of tacit knowledge which is inextricable and poorly documented.
- Proprietary knowledge is customized for the local context and specific business needs, to the point of being idiosyncratic. Unless the recipients of such knowledge have matching circumstances, the knowledge may not be as effective in use.
- Owners of proprietary knowledge expect to be rewarded for their long-term investments. They may make such knowledge available only under commercial terms, through purchases and licensing agreements.
- Publicly available frameworks and standards such as ITIL, Control Objectives for IT (COBIT), CMMI, eSCM-SP, PRINCE2, ISO 9000, ISO 20000 and ISO 27001 are validated across a diverse set of environments and situations rather than the limited experience of a single organization. They are subject to broad review across multiple organizations and disciplines. They are vetted by diverse sets of partners, suppliers and competitors.
- The knowledge of public frameworks is more likely to be widely distributed among a large community of professionals through publicly available training and certification. It is easier for organizations to acquire such knowledge through the labour market.

Ignoring public frameworks and standards can needlessly place an organization at a disadvantage. Organizations should cultivate their own proprietary knowledge on top

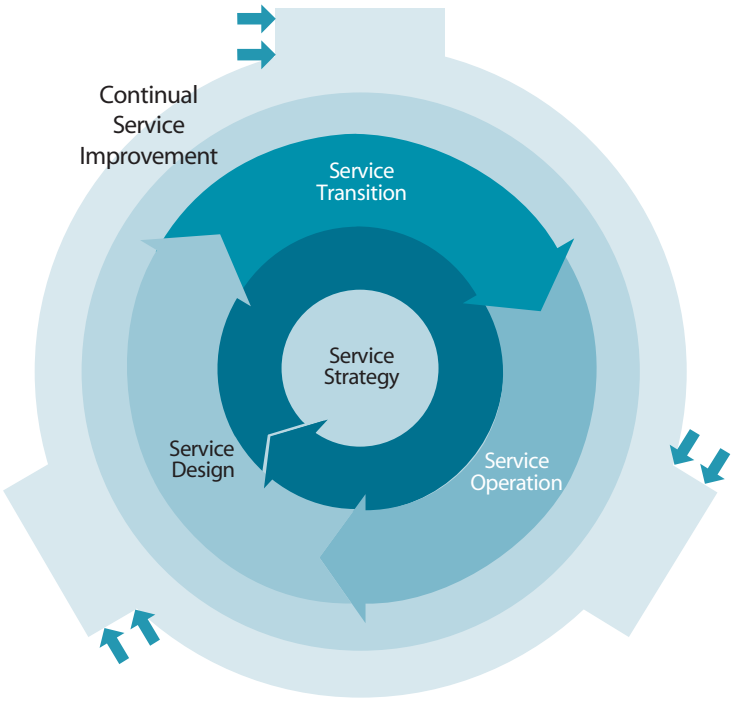


*Figure 1.2 ITIL Core*

of a body of knowledge based on public frameworks and standards. Collaboration and coordination across organizations are easier on the basis of shared practices and standards.

### 1.2.3 ITIL and good practice in Service Management

The context of this publication is the ITIL Framework as a source of good practice in Service Management. ITIL is used by organizations worldwide to establish and improve capabilities in Service Management. ISO/IEC 20000 provides a formal and universal standard for organizations seeking to have their Service Management capabilities audited and certified. While ISO/IEC 20000 is a standard to be achieved and maintained, ITIL offers a body of knowledge useful for achieving the standard.

The ITIL Library has the following components:

- **ITIL Core**: best-practice guidance applicable to all types of organizations that provide services to a business
- **ITIL Complementary Guidance**: a complementary set of publications with guidance specific to industry sectors, organization types, operating models and technology architectures.

The ITIL Core consists of five publications (see Figure 1.2). Each provides the guidance necessary for an integrated approach as required by the ISO/IEC 20000 standard specification:

- Service Strategy
- Service Design
- Service Transition
- Service Operation
- Continual Service Improvement.

Each publication addresses capabilities having direct impact on a service provider's performance. The structure of the core is in the form of a lifecycle. It is iterative and multidimensional. It ensures that organizations are set up to leverage capabilities in one area for learning and improvements in others. The Core is expected to provide structure, stability and strength to Service Management capabilities, with durable principles, methods and tools. This serves to protect investments and provide the necessary basis for measurement, learning and improvement.

The guidance in ITIL can be adapted for changes of use in various business environments and organizational strategies. The Complementary Guidance provides flexibility to implement the Core in a diverse range of environments. Practitioners can select Complementary Guidance as needed to provide traction for the Core in a given business context, much as tyres are selected based on the type of automobile, purpose and road conditions. This is to increase the durability and portability of knowledge assets and to protect investments in Service Management capabilities.

#### 1.2.3.1 Service Strategy

The Service Strategy volume provides guidance on how to design, develop and implement Service Management, not only as an organizational capability but also as a strategic asset. Guidance is provided on the principles underpinning the practice of Service Management which are useful for developing Service Management policies, guidelines and processes across the ITIL Service Lifecycle. Service Strategy guidance is useful in the context of Service Design, Service Transition, Service Operation and Continual Service Improvement. Topics covered in Service Strategy include the development of markets, internal and external, service assets, service catalogue and implementation of strategy through the Service Lifecycle. Financial Management, Service Portfolio Management, Organizational Development and Strategic Risks are among other major topics.

Organizations use the guidance to set objectives and expectations of performance towards serving customers and market spaces and to identify, select and prioritize opportunities. Service Strategy is about ensuring that organizations are in a position to handle the costs and risks associated with their service portfolios and are set up not just for operational effectiveness but for distinctive performance. Decisions made with regard to Service Strategy have far-reaching consequences, including those with delayed effect.

Organizations already practising ITIL use this volume to guide a strategic review of their ITIL-based Service Management capabilities and to improve the alignment between those capabilities and their business strategies. This volume of ITIL encourages readers to stop and think about why something is to be done before thinking of how. Answers to the first type of questions are closer to the customer's business. Service Strategy expands the scope of the ITIL Framework beyond the traditional audience of ITSM professionals.

#### 1.2.3.2 Service Design

The Service Design volume provides guidance for the design and development of services and service management processes. It covers design principles and methods for converting strategic objectives into portfolios of services and service assets. The scope of Service Design is not limited to new services. It includes the changes and improvements necessary to increase or maintain value to customers over the lifecycle of services, the continuity of services, achievement of service levels and conformance to standards and regulations. It guides organizations on how to develop design capabilities for Service Management.

#### 1.2.3.3 Service Transition

The Service Transition volume provides guidance for the development and improvement of capabilities for transitioning new and changed services into operations. This publication provides guidance on how the requirements of Service Strategy encoded in Service Design are effectively realized in Service Operations while controlling the risks of failure and disruption. The publication combines practices in Release Management, Programme Management and Risk Management and places them in the practical context of Service Management. It provides guidance on managing the complexity related to changes to services and Service Management processes, preventing undesired consequences while allowing for innovation. Guidance is provided on transferring the control of services between customers and service providers.

#### 1.2.3.4 Service Operation

This volume embodies practices in the management of Service Operations. It includes guidance on achieving effectiveness and efficiency in the delivery and support of services so as to ensure value for the customer and the service provider. Strategic objectives are ultimately realized through Service Operations, therefore making it a critical capability. Guidance is provided on how to maintain stability in Service Operations, allowing for changes in design, scale, scope and service levels. Organizations are provided with detailed process guidelines, methods and tools for use in two major control perspectives: reactive and proactive. Managers and practitioners are provided with knowledge allowing them to make better decisions in areas such as managing the availability of services, controlling demand, optimizing capacity utilization, scheduling of operations and fixing problems. Guidance is provided on supporting operations through new models and architectures such as shared services, utility computing, web services and mobile commerce.

#### 1.2.3.5 Continual Service Improvement

This volume provides instrumental guidance in creating and maintaining value for customers through better design, introduction and operation of services. It combines principles, practices and methods from Quality Management, Change Management and Capability Improvement. Organizations learn to realize incremental and large-scale improvements in service quality, operational efficiency and business continuity. Guidance is provided for linking improvement efforts and outcomes with Service Strategy, Service Design and Service Transition. A closed-loop feedback system, based on the

Plan, Do, Check, Act (PDCA) model specified in ISO/IEC 20000, is established and capable of receiving inputs for change from any planning perspective.

The day-to-day operational management of IT Services is significantly influenced by how well an organization's overall IT service strategy has been defined and how well the ITSM processes have been planned and implemented. This is the fourth publication in the ITIL Service Management Practices series and the other publications on Service Strategy, Service Design and Service Transition should be consulted for best practice guidance on these important stages prior to Service Operation.

Service Operation is extremely important, as it is on a day-to-day operational basis that events occur which can adversely impact service quality. The way in which an organization's IT infrastructure and its supporting ITSM processes are operated will have the most direct and immediate short-term bearing upon service quality.

## 1.3 PURPOSE

Service Operation is a critical phase of the ITSM lifecycle. Well-planned and well-implemented processes will be to no avail if the day-to-day operation of those processes is not properly conducted, controlled and managed. Nor will service improvements be possible if day-to-day activities to monitor performance, assess metrics and gather data are not systematically conducted during Service Operation.

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## 1.4 USAGE

This publication should be used in conjunction with the other four publications that make up the ITIL Service Lifecycle.

Readers should be aware that the best-practice guidelines in this and other volumes are not intended to be prescriptive. Each organization is unique and must 'adapt and adopt' the guidance for its own specific needs, environment and culture. This will involve taking into account the organization's size, skills/resources, culture, funding, priorities and existing ITSM maturity and modifying the guidance as appropriate to suit the organization's needs.

For organizations finding ITIL for the first time, some form of initial assessment to compare the organization's current processes and practices with those recommended by ITIL would be a very valuable starting point. These assessments are described in more detail in the ITIL Continual Service Improvement publication.

Where significant gaps exist, it may be necessary to address them in stages over a period of time to meet the organization's business priorities and keep pace with what the organization is able to absorb and afford.

## 1.5 CHAPTER OVERVIEW

Chapter 2 introduces the concept of Service Management as a practice. Here, Service Management is positioned as a strategic and professional component of any organization. This chapter also provides an overview of Service Operation as a critical component of the Service Management Practice.

The key principles of Service Operation are covered in Chapter 3 of this publication. These principles outline some of the basic concepts and principles on which the rest of the publication is based.

Chapter 4 covers the processes performed within Service Operation – most of the Service Operation processes are reactive because of the nature of the work being performed to maintain IT services in a robust, stable condition. This chapter also covers proactive processes to emphasize that the aim of Service Operation is stability – but not stagnation. Service Operation should be constantly looking at ways of doing things better and more cost-effectively, and the proactive processes have an important role to play here.

Chapter 5 covers a number of Common Service Operation activities, which are groups of activities and procedures performed by Service Operation Functions. These specialized, and often technical, activities are not processes in the true sense of the word, but they are all vital for the ability to deliver quality IT services at optimal cost.

Chapter 6 covers the organizational aspects of Service Operation – the individuals or groups who carry out Service Operation processes or activities – and includes

some guidance on Service Operation organization structures.

Chapter 7 describes the tools and technology that are used during Service Operation.

Chapter 8 covers some aspects of implementation that will need to be considered before the operational phase of the lifecycle becomes active.

Chapter 9 highlights the challenges, Critical Success Factors and risks faced during Service Operation, while the Afterword summarizes and concludes the publication.

ITIL does not stand alone in providing guidance to IT managers and the appendices outline some of the key supplementary frameworks, methodologies and approaches that are commonly used in conjunction with ITIL during Service Operation.