

### White Paper

# Enterprise Architecture and ITIL: Where is the Value in ITIL?

### **WP0062** | March 2013



#### **Trevor Lea Cox**

Trevor Lea-Cox has over 30 years experience in senior Information, Systems and Technology Management and CEO roles. He is a past Group-level CIO and director.

In this time he has developed and implemented Information, Systems and Technology strategies and business automation programmes for a wide variety of large and small organizations, including companies and groups of companies. A special focus has been the introduction of new Products and Services using lean and agile techniques and subsequently scaling up, including in the contexts of major business change and joint ventures.

### What is ITIL?

The IT Infrastructure Library® or "ITIL®"¹ is a set of best practice guidelines published by the Cabinet Office of the British Government for IT Service Management. These guidelines have evolved considerably since the early 1990s when I first started to implement ITIL. The most obvious changes made in this time have been on the focus of ITIL; from Function, through Process and now on the Service Lifecycle. The latest version is "ITIL 2011" which has replaced "ITIL Version 3"².

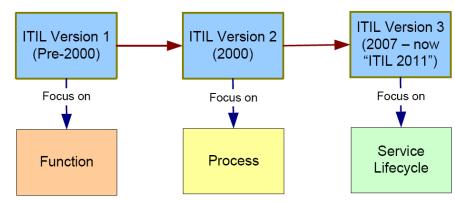


Figure 1 - How ITIL has evolved in focus

Access our **free**, extensive library at www.orbussoftware.com/community

<sup>&</sup>lt;sup>1</sup> ITIL® and IT Infrastructure Library® are Registered Trade Marks of the Cabinet Office of the Government of the United Kingdom.

 $<sup>^{\</sup>rm 2}$  This marks a new sequence of version numbers based on the date of issue.

### Content

What is ITIL?	1
Why is Service Management important?	3
Does our IT Function really need IT Service Management now?	5
How easy is it to introduce and integrate IT Service Management into an established IT Function?	6
Developing and maintaining the Service Management System	7
Providing architectural support for managing IT Services.	8
In Conclusion	8
Appendix A: Summary of the Processes at each ITIL Service Lifecycle Stage	9

The change to focus on the Lifecycle of IT Services has been interpreted widely as a highly beneficial move. The Service Lifecycle has been divided into 5 "Stages":

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

Each Stage contains a number of Processes that can be implemented to improve the quality of the IT Services provided by your organization. There are over 25 processes to address in a full implementation of ITIL and most organizations take well over two years to do this, if they implement the full set at all<sup>3</sup>. Furthermore, when starting ITIL, it is likely that many organizations will already have at least some of these processes established, even if in a modest form. This helps to ease into the ITIL environment.

All this begs the question: why should an organization commit to implementing IT Service Management and the recommendations of ITIL at all?

### Why is Service Management Important?

Primarily, it is because Services provide fundamental and powerful business building blocks. In this respect the IT function is no different.

Consider the ITIL definition of a Service: "A means of delivering value to Customers by facilitating Outcomes Customers want to achieve without the ownership of specific Costs and Risks".

Packaging what IT does for the organization (IT Customers) as a set of IT Services provides a very good way to simplify the management of IT and as a result it has benefits to both IT Customers and IT Service Providers. Some of the more important of these benefits (based on my experience) are as follows:

- IT Services clearly identify the outcomes the IT Customer can expect from requesting an IT Service, including an agreed target level of performance.
- They also identify the boundaries of the work to be done more clearly. A big problem in most IT departments that have not yet specified their IT Services, is that when work is requested by IT Customers, there is no well-defined and standard "template"

<sup>&</sup>lt;sup>3</sup> See Appendix A for a summary of the ITIL Processes by Service Lifecycle Stage.

to help identify the work to be done. When these exist, such (service) templates make it easy for Customers and IT to compare what is on offer (as standard) against what is required and hence to determine if any variations are required. It is a very effective way of preventing "scope creep".

- Standard IT Services are also a more efficient and effective way to run a business:
  - They can be planned in advance to ensure that the IT Department has enough assets and resources to deliver each Service to meet agreed Service Levels.
  - o Because IT Services are (usually) well-defined, they are a lot easier to explain to prospective Customers and indeed, to "market" to the rest of the organization.
  - They are easier to track from the cost, demand and performance perspectives. This has big implications for IT Strategy and Budgets.
  - o IT Services generally provide an easier way to manage the IT function and its component parts.

In summary, the concept and use of IT Services is a powerful mechanism for structuring, managing (and growing) the IT function. More specifically they represent a far easier way to manage and improve performance of IT. But to do this on a consistent, reliable and sustainable basis, IT Services need to be designed, developed, operated and managed on a professional basis.

The best way to achieve this is to establish a "Service Management System"<sup>4</sup>. In its simplest form, a Service Management System is the system of resources and processes (and if automated, also information processing systems) that are used to manage the organization's IT Services on a consistent and formal basis. The processes used need not be all the processes in ITIL 2011 – everyone has to start somewhere and they do take time to implement – but it is likely that the Service Management System will consist of a significant subset. ISO/IEC 20000-1:2011 is the standard for implementing IT Service Management and it specifies the requirements for implementing a Service Management System for the IT Function. It is underpinned by the ITIL best practice guidelines for IT Service Management.

Management system to direct and control the service management activities of the service provider.

- Note 1: A management system is a set of interrelated or interacting elements to establish policy and objectives and to achieve those objectives.
- Note 2: The SMS includes all service management policies, objectives, plans, processes, documentation and resources required for the design, transition, delivery and improvement of services and to fulfil the requirements in this part of ISO/IEC 20000.
- Note 3: Adapted from the definition of "quality management system" in ISO 9000:2005.

<sup>&</sup>lt;sup>4</sup> Service Management System definition from ISO/IEC 20000-1:2011:

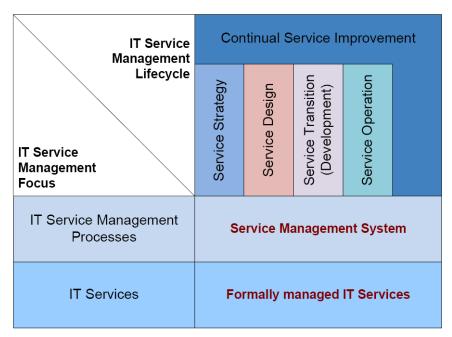


Figure 2 - The effective scope of ITIL 2011

Figure 2 summarizes diagrammatically the effective scope of ITIL 2011. It is first and foremost the best practice guidelines for the processes that are implemented to manage IT Services. These processes effectively constitute a Service Management System which may comply with the requirements of the ISO20000 standard. The Service Management System is then used to produce and formally manage IT Services.

## Does our IT Function really need IT Service Management now?

Remember the ITIL definition of a Service? ("A means of delivering value to Customers by facilitating Outcomes Customers want to achieve without the ownership of specific Costs and Risks"). It is important for understanding the following argument.

New IT functions (departments) often perform IT Services very well initially because the scope and complexity of these services are limited and often they are performed by a single person who knows the IT Customers, their needs and the technology well. The IT Services are also usually provided on an informal basis; in other words they are not explicitly defined and designed.

As the organization grows in scope and complexity such services require more people and greater domain knowledge to be able to perform them well. In other words these services require a team effort. If IT Management don't coordinate and manage these IT Services on a more formal basis, IT performance and hence IT Customer satisfaction will decline. In larger IT departments it is not an option to manage key IT Services on an informal basis. This merely leads to chaos, poor performance and very unhappy customers.

As a result, at some point in the development of an IT Function in a growing organization, it will become essential to introduce formal Service Management disciplines and hence, probably ITIL for guidance.

So to answer the question - Small IT departments usually do not need to introduce formal Service Management especially as they often have other priorities and demands for their scarce IT resources. But this is not to say that they will not benefit from introducing the "core" ITIL processes at an early stage (for example Incident and Problem Management). However, there will be a point in the growth of the IT Function when the need to introduce formal Service Management is no longer optional. Furthermore, if you wait for a crisis to trigger this need, it is too late! The damage will have been done. Because each recommended ITIL process brings benefits of its own, quite apart from the synergy of creating a Service Management System, a better strategy by far is to start introducing the ITIL processes on an early, proactive and controlled basis.

In fact, much of the benefit in the early stages of implementing the ITIL processes will be obtained from managing the IT assets and resources (that support the informal IT Services provided) on a better (more professional) basis.

## How easy is it to introduce and integrate IT Service Management into an established IT Function?

Generally it is not difficult. If ITIL is the first IT Governance framework to be introduced then it is relatively easy because the IT function will merely be introducing new processes and systems or upgrading existing processes and / or systems.

One of the early challenges is the order in which you introduce the ITIL processes. The ITIL processes are highly inter-dependent and anyone having to implement them will benefit from having a good architectural view of them. This can be made substantially easier by developing, or more cost-effectively, by purchasing a set of good quality ITIL Process diagrams (or "Process Maps", such as those available for iServer) that show not only the structure of the ITIL processes to be implemented but also how the processes integrate with each other. Such process maps are also very useful for helping to select and configure your chosen set of (ITIL compliant) information systems.

A number of issues may have to be addressed by the Enterprise Architecture (EA) department<sup>5</sup> if ITIL is introduced into an established EA environment, especially if a set of process diagrams has been purchased. There are two key areas to consider:

- First, it is likely that there will be a number of overlaps of common architectural objects to manage. ITIL introduces a lot of new definitions of objects that will need to be reconciled (when required) with any existing definitions.
- The new ITIL framework may require new architectural views (and hence new model types) or the purchased architecture may introduce new architectural views and standards. For example, if the purchased set of diagrams uses say, BPMN 2.0 diagrams and you have not adopted this standard, a decision on whether to adopt the new standard (and how to do so) will need to be taken. Similarly, the EA standards and controls to be used for any new model types introduced will need to be established.

Subsequently, an EA department can play an increasingly important and beneficial role in introducing IT Service Management from two perspectives:

- Helping to ensure that the Service Management System is developed and maintained in good condition.
- Providing supporting Architecture Services to help design, develop, troubleshoot and maintain formal or "managed" IT Services.

### Developing and maintaining the Service Management System

As mentioned earlier, the ITIL processes are highly inter-dependent. So as each new ITIL process is introduced, it is important to ensure that related processes are correctly integrated. For example, Incident Management and Problem Management are closely related. If Incident Management is already established and Problem Management is introduced next, part of the implementation of Problem Management will include the mechanisms to integrate and then inter-operate with Incident Management.

Similarly, if an existing ITIL process is updated, the impact on related processes needs to be assessed and appropriate action taken. This also applies to new sets of information. For example, if a new IT Site and all its assets and configurations are taken on into the Configuration Management system, some new category codes may have to be added to, for example, Incident and Problem Management.

<sup>&</sup>lt;sup>5</sup> Or the department with responsibility for maintaining an Enterprise Architecture or its equivalent.

## Providing architectural support for managing IT Services.

ITIL gives some guidance on the structure of IT Services but one of the more significant challenges is to ensure the integrity and effectiveness of existing IT Services is not compromised by change. In particular:

- When a new IT Service is introduced or an existing IT Service is upgraded or decommissioned, it is important to assess the impact on related IT Services and to decide on appropriate action.
- When a new process is introduced to the Service Management System, or an existing process changed or removed, it is important to ensure that the impact on existing IT Services is identified and again, the appropriate action taken.

Ensuring the success of IT Services without having a good understanding of the structure of the Service Management System and the IT Services is not only very difficult, but it is also very risky as changes cannot be adequately assessed, especially in larger IT environments. (Hence the need for Change Evaluation).

### In Conclusion

Is ITIL just more "alphabet soup" or does it provide real value? Services are fundamental building blocks of any organization. Whether managed on a formal or informal basis they are inevitable. Introducing a Service Management System based on ITIL to help manage IT Services on a consistent and professional basis introduces so many benefits to both Customer and Service Providers it is hard not to respond; "real value"!

Even a small IT department and their customers can benefit significantly from introducing the "core" ITIL processes.

To understand this better I will be exploring the ITIL 2011 processes at each stage of the Service Lifecycle in future papers, one paper for each stage<sup>6</sup>:

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

For each stage I will explain the ITIL processes at that stage briefly and discuss how they might affect and be applied to a typical EA department. The content will be kept relatively simple and will be no

<sup>&</sup>lt;sup>6</sup> Approximately one every two months during 2013.

more advanced than in the following book; "Introduction to the ITIL® Service Lifecycle: 2011 edition".

I would be delighted if you would join me on this journey!

# Appendix A: Summary of the Processes addressed at each ITIL Service Lifecycle Stage

ITIL Service Lifecycle Stage	ITIL Process
Service Strategy	Strategy Management for IT Services Service Portfolio Management Financial Management for IT Services Demand Management Business Relationship Management
Service Design	Design Coordination Service Catalogue Management Service Level Management Availability Management Capacity Management IT Service Continuity Management Information Security Management Supplier Management
Service Transition	Transition Planning and Support Change Management Service Asset and Configuration Management Release and Deployment Management Service Validation and Testing Change Evaluation Knowledge Management
Service Operation	Event Management Incident Management Request Fulfilment Problem Management Access Management
Continual Service Improvement	Seven-step Improvement Process

### © Copyright 2013 Orbus Software. All rights reserved.

No part of this publication may be reproduced, resold, stored in a retrieval system, or distributed in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior permission of the copyright owner.

Such requests for permission or any other comments relating to the material contained in this document may be submitted to: marketing@orbussoftware.com

### **Orbus Software**

3rd Floor 111 Buckingham Palace Road London SW1W 0SR United Kingdom

