AKIMA

An Introduction to ITIL 4

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Introduction

Information technology is the heartbeat of every organization. It enables government missions, connects employees and constituents, and facilitates efficient operations across the enterprise. However, IT is also in a constant state of change. On one hand, that means we gain access to rapidly evolving features and can continuously improve the services we deliver. On the other hand, it means that IT professionals—and organizations as a whole—can quickly be left behind if they do not keep pace.

One way to alleviate this challenge is proper management. ITIL® has become the most widely accepted framework for IT Service Management (ITSM) in the U.S. It is a systematic approach to ITSM that helps government organizations and businesses manage risk, strengthen customer relationships, establish cost-effective practices, and build stable IT environments. ITIL allows for growth, scale, and change—three vitally important elements for agencies of any size. In the U.S. the ITIL framework has been tried, tested, and proven over the past 20 years, with most government organizations using some form of ITIL-based service management today.

This article is designed to provide a brief introduction to the latest framework update: ITIL 4. I'll cover the origin and history of ITIL, as well as offer a high-level overview of the current framework and its key benefits for U.S. government agencies and the federal contracting community.

Origin & History

The origin of ITIL dates back the 1980s in the United Kingdom. ITIL, which stands for "IT Infrastructure Library" since it contains documents, templates, and checklists, quickly spread across Europe during the 1990s as a way to organize IT, manage complexity, and align best to support business operations. In early 2000, Microsoft used ITIL as a basis to develop their Microsoft Operational Framework (MOF). Although similar to ITIL, MOF addresses the specific services of the Microsoft systems suite. At the same time, many U.S. agencies and businesses also embraced the ITIL framework to better orchestrate the ever-changing complexity of IT operations, and from there, it quickly became the most widely used ITSM best practice approach worldwide. 2001 saw the release of ITIL Version 2, followed in 2007 by ITIL Version 3 (ITIL V3) which adopted the service Lifecycle approach with an emphasis on IT business integration. After an ITIL V3 update in 2011, the ITSM community was further challenged to manage IT services in conjunction with related management methodologies such as Agile and DevOps software development, and Lean Six Sigma. In February 2019, the first ITIL 4 certification course, ITIL Foundation, was released, bringing the framework up to date with a more holistic approach to ITSM, focusing on end-to-end service management from demand to value—including support for Agile, DevOps, and Lean Six Sigma. By summer 2020 all the advanced ITIL certification courses were released. With all the ITIL 4 training programs now in place, ITIL V3 training ends in December 2020, and all future ITIL certifications will be through the ITIL 4 curricula.

ITIL 4

With this latest update, ITIL is no longer an acronym— "ITIL 4" is a trademarked brand name. ITIL 4 offers a practical and flexible basis to support organizations on their digital journey. It considers the impact technology has on the business, as well as how the framework integrates with modern methodologies (Agile, DevOps, etc.) to support overall digital transformation.

The key elements that comprise ITIL 4 are:

- Four Dimensions
- Guiding Principles
- Service Value System & Service Value Chain
- Continual Improvement
- Move from Processes to Practices

Four Dimensions

As I stated above, a holistic approach to ITSM is key in ITIL 4. The four dimensions listed below are critical to the successful facilitation of value for customers and other stakeholders. It is essential that an appropriate amount of focus is given to each of these dimensions to generate balanced and effective value.

1. **Organizations and People**: A culture that supports its objectives; the right level of capacity and competency among its workforce

2. **Information and Technology**: The information, knowledge, and technologies (and tools) required for management of services

3. **Partners and Suppliers**: Relationships with other businesses involved in design, deployment, delivery, support, and continual improvement of services

4. **Value Streams and Processes**: How various parts of the organization work in an integrated and coordinated way is important to enable value creation through products and services
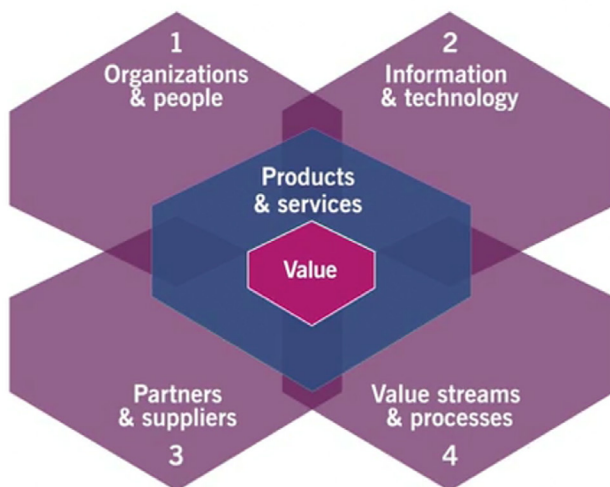
Guiding Principles

The guiding principles outlined in ITIL 4 are not new to ITIL; however, they are meant to help IT professionals adopt and adapt the framework's guidance to their own specific needs and circumstances. The key is to see the big picture and "think like a CIO." These guiding principles help IT professionals define approaches and navigate difficult decisions and should be followed at every stage of service delivery.

New in this ITIL update, is an increased focus on collaboration, automation, and keeping things simple. These seven guiding principles reflect principles commonly found in Agile, DevOps and Lean methodologies.

1. Focus on value

2. Start where you are

3. Progress iteratively with feedback

4. Collaborate and promote visibility

5. Think and work holistically

6. Keep it simple and practical

7. Optimize and automate

Figure 1: Four Dimensions of ITIL 4 (Source: AXELOS, the lead international organization for ITIL documentation and training)

Service Value System & Service Value Chain

The Service Value System (SVS) is a key component of ITIL 4. It describes how all the components and activities of an organization work together to enable co-creation of value. The SVS has interfaces with other organizations, forming an ecosystem that can also create value for those organizations, their customers, and stakeholders.

For example, a database developer working for a government contractor may be physically located next to a developer working for a government agency. This provides the opportunity for the two developers to engage with each other and share best practices in a co-creation situation.

The Service Value Chain (SVC) is a flexible operating model for the creation, delivery, and continual improvement of services. The SVC defines six key activities: Plan; Improve; Engage; Design and Transition; Obtain/Build; and Deliver and Support. These activities can be combined in many different sequences, allowing an organization to define several variants of value streams. The flexibility offered by the SVC allows organizations to effectively and efficiently react to changing demands from stakeholders.
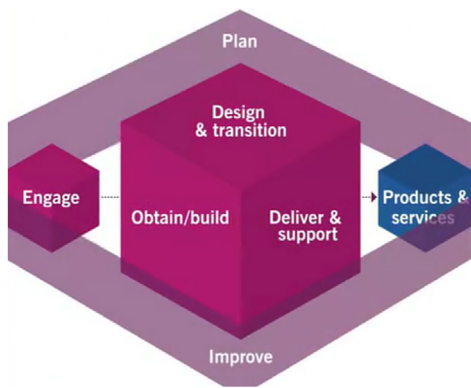

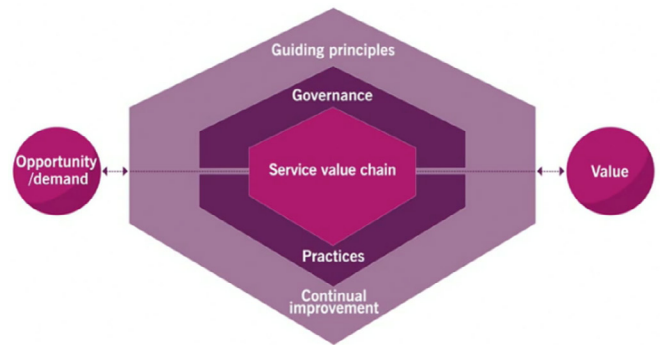*Figure 2: Service Value System (Source: AXELOS)*

Figure 3: Service Value Chain (Source: AXELOS)

Continual Improvement

Continual improvement takes place at all levels and across all groups within an organization and the SVS. It features six key steps, but is not prescriptive in a linear sense. Continual improvement can be triggered at any time and steps can be taken repeatedly until they provide the desired result.

1. What is the vision?
2. Where are we now?
3. Where do we want to be?
4. How do we get there?
5. Take action.
6. Did we get there?

Move from Processes to Practices

In previous versions of ITIL, "processes" were used to manage IT services. ITIL 4 expands on these traditional processes, incorporating elements such as culture, technology, information, and data management to offer a more holistic approach to the way organizations work. These are known as "practices," and are a fundamental part of the ITIL 4 framework. The SVS includes 34 management practices or sets of organizational resources for performing work or accomplishing an objective. These practices continuously improve compared to the static processes from before.

General Management Practices

- Architecture Management
- Continual Improvement
- Information Security Management
- Knowledge Management
- Measurement and Reporting
- Organizational Change Management
- Portfolio Management
- Project Management
- Relationship Management
- Risk Management
- Service Financial Management
- Strategy Management
- Workforce and Talent Management

Service Management Practices

- Availability Management
- Business Analysis
- Capacity and Performance Management
- Change Control
- Incident Management
- Monitoring and Event Management
- Problem Management
- Release Management
- Service Catalog Management
- Service Configuration Management
- Service Continuity Management
- Service Design
- Service Desk
- Service Level Management
- Service Request Management
- Service Validaton and Testing

Technical Management Practices

- Deployment Management
- Infrastructure and Platform Management
- Software Development and Management

ITIL Certifications

Being ITIL-certified provides numerous benefits to not only the individual who is certified, but also to the organization at which the person is employed. ITIL Foundation is the introductory certification of ITIL 4 and is a pre-requisite for higher levels of certifications. From there, certifications happen in two streams: ITIL Managing Professional (MP) and ITIL Strategic Leader (SL). The highest level that can be achieved is the ITIL Master, which can only be accomplished by completing both streams and demonstrating proven experience and a deep knowledge of the framework. For more information about getting ITIL certified, I encourage you to visit www.axelos.com.
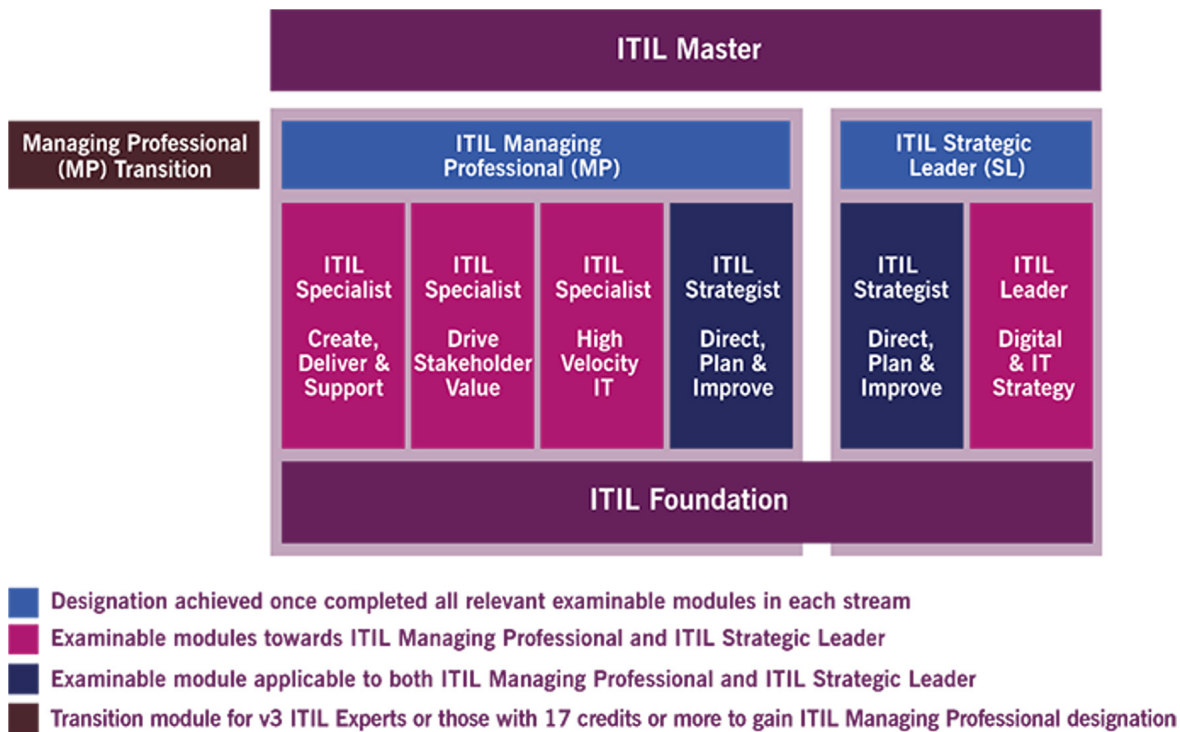
Conclusion

In summary, ITIL 4 allows organizations to approach ITSM more holistically than ever before. It enables better measures of technical support performance, helps separate administrative and technical tasks to increase efficiency, and can keep non-technical staff from getting bogged down in technical support issues.

Organizations that leverage ITIL 4 are better prepared to handle today's complex missions and create value that extends across the enterprise.