



ITIL Overview

**A Focused Approach to Innovation
and Continuous Improvement**

The Information Technology Infrastructure Library® (ITIL®) helps companies and government agencies improve the quality and reduce the costs of IT services that support their business objectives. The Federal government recognized that by leveraging ITIL's recommendations and best practices agency IT departments could decrease overall IT spending and continually improve IT service management. Consequently, government RFPs are being issued with the requirement that vendors employ ITIL methodologies throughout all stages of an agency's IT programs.



A graphic representation of ITIL V3 shows Service Strategy and the constantly evolving Service Design, Service Transition, and Service Operation sections surrounded on all fronts by Continual Service Improvement.

Historical Perspective

ITIL originated in the 1980s when the British government determined that it was not receiving a sufficient level of IT service quality. First released as the Government Information Technology Infrastructure Management (GITIM) framework by the United Kingdom's Office of Government Commerce, this series of 31 books provided best practices and guidelines for managing and maintaining IT infrastructures.

In the 1990s, the second version of ITIL was released and rapidly accepted by companies and government agencies in Europe and throughout the world. With ITIL V2, the number of books was reduced from the original 31 to 10. Of these, Service Delivery and Service Support were the two most widely adopted books.

Service Delivery focused on preparing for future change through:

- Service-level management
- Financial management
- Capacity management
- IT service continuity
- Availability management

Service Support focused on daily operations, including:

- Incident management
- Problem management
- Change management
- Configuration management
- Release management

In 2007, ITIL V3 was introduced. With ITIL V3, V2's ten books were consolidated into five books, each approximately 300 pages in length and dedicated to a major activity—Service Strategy, Service Design, Service Transition, Service Operation, and Continual Service Improvement.

It is important to understand how the five volumes are interrelated to gain the full perspective of how an organization can leverage each of them to improve service delivery methods and reduce costs. The following descriptions highlight the focus of each section and show how each relates to the process elements that follow in other books.

Service Strategy links IT service strategies to customer value. The identification of market opportunities for which services could be developed to meet a requirement on the part of internal or external customer ensures

that every stage of the service lifecycle stays focused on the business case. The output is a strategy for the design, implementation, maintenance, and continual improvement of the service as an organizational capability and a strategic asset. Key areas of this volume are Service Portfolio Management and Financial Management.

Service Design involves the development of specifications that address all aspects of the proposed service, as well as the processes intended to support it, outlined in the service strategy. Key areas of this volume are Availability Management, Capacity Management, Continuity Management, and Security Management.

Service Transition focuses on the implementation of the service design and the process of transitioning that service from “where we are” to “where we want to be.” New and enhanced services are subjected to production-quality assurance, including testing, change management, and release management, for controlled release into production. There is an area of overlap between Service Transition and Service Operation. Key areas of this volume are Change Management, Release Management, Configuration Management, and Service Knowledge Management.

Service Operation focuses on the delivery and control process activities required to operate the services and maintain their functionality, as defined in service level agreements, and achieve a highly desirable, steady state of service management on a day-to-day basis. Key areas of this volume are Incident Management, Problem Management, and Request Fulfillment.

Continual Service Improvement describes proven practices for continual improvement in the quality of the services that the IT organization delivers to the business. Key areas of this volume are Service Reporting, Service Measurement, and Service Level Management.

A Common Language

One of ITIL's primary benefits is that it provides a common vocabulary with a glossary of tightly defined and widely agreed upon terms, enabling all departments, agencies, customers, and service providers, like GTSI, to speak a common language. This is highly valuable, especially when establishing goals and in gaining a consensus regarding expected outcomes and business objectives. The following terms are a big part of any ITIL discussion and their definitions should be thoroughly understood.

An Incident: *“Any event that is not part of the standard operation of a service and that causes, or may cause, an interruption to, or a reduction in, the quality of that service.”*

An incident might be something that has been reported, such as a user reporting that he cannot access his corporate e-mail or a database server crash.

A Problem: *“The unknown root cause of one or more existing or potential Incidents.”*

Problems may sometimes be identified because of multiple incidents that exhibit common symptoms. Problems can also be identified from a single significant incident, indicative of a single error, for which the cause is unknown. Occasionally problems will be identified well before any related incidents occur.

CMDB (configuration management data base): *“A database that contains details about the attributes and history of each Configuration Item and details of the important relationships between the items.”*

The CMDB is the major repository that all ITIL processes access. The information may be simple like the amount of RAM in a standard interrupt service routine (ISR) desktop, or it may be more complex such as the number of times that a server has rebooted itself due to memory issues.

Value to Business

“Realising the Benefits” by Ken Doughty¹ profiles a company that started the ITIL process by focusing on incident, problem, and change management.

Mr. Doughty stated that “With the increase in services the organization's incident, problem and change management processes were under pressure to not only continue to sustain the high level of availability required in this competitive environment, but also to provide this service cost-effectively.” In the paper, he reported statistics that showed the state of the organization's current operations:

- 480 million transactions processed annually
- Peak transaction load is 38,000 per minute
- A telecommunications network that supports over 3200 sites

¹ “Realising the Benefits,” Ken Doughty 2003.

The IT department developed a business case for designing a set of incident, problem, and change management processes that would provide the company with strategic benefits, such as:

- Increased protection for the IT infrastructure
- Increased service level, availability, and customer delivery
- Strategic change in IT service management culture from reactive to proactive
- Significantly improved processes that comply with a recognized best practice standard (ITIL)

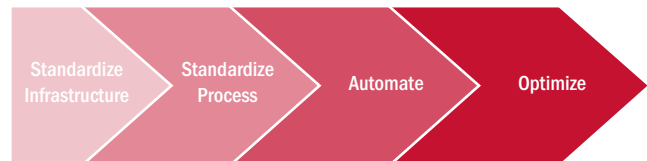
It was determined that the company needed a standard software tool that could meet specified goals in each of the following areas:

Incident Management: Restore normal service operation as quickly as possible with minimum disruption to the business, thus ensuring that the best achievable levels of availability and service are maintained.

Problem Management: Minimize the adverse effect on the business as a result of incidents and problems caused by errors in the infrastructure and proactively prevent the occurrence of incidents, problems, and errors.

Change Management: Ensure that standardized methods and procedures are used for efficient and prompt handling of all changes to minimize the impact of any related incidents upon service.

Once the goals were set, the company looked at existing tools within the organization and in the marketplace as well as considered the possibility of developing its own tool. After careful evaluation, the company settled on implementing a new commercial off-the-shelf tool specifically designed for these processes. Not only did the revision of the processes associated with selecting and implementing the tool give the company many new capabilities, the availability and reliability of the system also improved.



Guidelines for Getting Started

Understanding the basics of ITIL V3 and the terminology will help in discussions about implementing ITIL. Delays, confusion, and interruptions can be avoided by keeping the following guidelines in perspective:

- Focus on the processes first and then look at the tools.
- Keep the focus narrow. ITIL can cause a cultural shift within an organization; consequently, start with one process such as incident, problem, or change management that can show measureable improvement results.
- Gain top-down and bottom-up support for changing processes to overcome resistance to change by one or many parts of the organization.
- Use metrics that validate continuous improvement to encourage acceptance of ITIL. Numbers showing incremental progress can be achieved by establishing generous thresholds and then raising the bar.
- Do not reinvent the wheel. Participate in training programs provided by certified ITIL trainers and consult with ITIL experts.

ITIL resources available from GTSI include:

- Speaker presentations and videos from GTSI's Technology Leadership Seminar "Leveraging ITIL to Reduce IT Costs and Boost Efficiencies" at GTSI.com/tls
- Enterprise Education Services ITIL training flyer.



GTSI Corp. is the first information technology solutions provider offering a Technology Lifecycle Management (TLM) approach to IT infrastructure solutions delivered through industry-leading professional and financial services. GTSI employs a proactive, strategic methodology that streamlines technology lifecycle management, from initial assessment to acquisition, implementation, refresh, and disposal. TLM allows government agencies to implement solutions of national and local significance quickly and cost-effectively. GTSI's certified engineers and project managers leverage strategic partnerships with technology innovators. These experts use proven, repeatable processes to design, deploy, manage, and support simple to complex solutions, to meet governments' current and future requirements and business objectives. GTSI is headquartered in Northern Virginia, outside of Washington, D.C.

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