



## ITIL Version 3: Support for the Growing Importance of Business Service Management

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## Introduction

Organizations that are focused on applying best practices from the IT Infrastructure Library (ITIL®) have numerous questions about the newest release, known as the ITIL Service Management Practices, or ITIL Version 3 (v3). Will it live up to the expectations of IT executives who must continually face the challenge of supporting innovative projects to help their companies grow? Can this version of ITIL really provide better guidance so IT departments can work more efficiently, even in a cost-constrained environment? Will the new release of ITIL help IT reduce the time it takes to complete IT implementations and make deployments run more smoothly? Will current ITIL processes, such as incident and problem management, go away, be modified, or evolve into more useful forms? What are the major differences between ITIL v2 and ITIL v3?

This paper addresses these questions and explains how ITIL v3 can help organizations achieve Business Service Management (BSM), an approach for managing IT from the perspective of the business by prioritizing IT resources and activities according to impact on business services. These activities include infrastructure resource mapping, end-to-end management, business process mapping, and dynamically linking services to infrastructure.

ITIL v3, as referenced in the *Service Design* book, provides a high-level definition of BSM as “the ongoing practice of governing, monitoring, and reporting on IT and the business service it impacts.” Basically, this approach leverages processes and technology so that the goals of IT are the same as those of the business.

BSM solutions and ITIL practices are highly complementary in helping organizations manage IT from a business perspective. In fact, BSM solution developers are working closely with ITIL architects to ensure this continuing convergence of ITIL processes and service management solutions.

The paper reviews how ITIL v3 will enable organizations to move from *alignment* of IT with the business to the *integration* of IT with the business. This integration is achieved by following a lifecycle management approach to services.

Think of ITIL v3 as an evolution of ITIL v2 in certain areas. These areas include the transition from IT-business alignment to IT-business integration. They also include a focus on service lifecycle management, and the introduction of the concept of services as assets. In addition, they cover how to quantify return on investment (ROI) and return on value, and also place increased emphasis on being proactive and eliminating silos.

This paper:

- > Examines what’s new in ITIL v3 and how BSM supports IT’s growing requirements
- > Discusses the evolution of ITIL from v2 to v3
- > Discusses how organizations can transition from ITIL v2 to ITIL v3
- > Describes the business benefits from this transition

## What's New? ITIL v3 Helps Organizations Innovate

Business managers are looking for IT to go beyond helping their companies meet business objectives. They also expect IT to make the business more innovative. IT, therefore, should be focused on understanding new technology directions and leveraging technology not only to increase the effectiveness of business processes, but also to open up new business opportunities with innovative new services and products. This way of doing business requires IT to take a major step up in service management maturity level. It changes the emphasis from simply having good structure, rigorous control, and process elements for effective service management to having IT become a partner in the business.

NOTE: Some of the information in this section has been obtained from the official umbrella site of the British Office of Government Commerce (OGC) ([www.best-management-practice.com](http://www.best-management-practice.com))

### BSM and ITIL v3

BSM is based on using technology and processes to help ensure that everything IT does is considered in the context of its contribution to business value. ITIL practices help support managing IT from this business perspective. Many IT organizations have embraced ITIL because its disciplines enable IT to do a better job, increasing the quality of service while lowering costs. In ITIL v3, the framework builds on the v2 foundation to evolve IT industry thinking to the next level of service management maturity. BSM helps take IT to the next level of service management maturity, and ITIL v3 specifically incorporates BSM as a best practice.

The core publications of the ITIL service management practices for ITIL v3 focus on demonstrating business value, beginning with the *Service Strategy* publication, which deals with the positioning of IT service management and BSM. This positioning is important because many organizations are focused on integrating business applications — both internally and with their business partners — to automate end-to-end business processes and deliver business services. The challenge these organizations face is how to derive operational objectives from business services and to manage the services accordingly. An example of this type of objective is to reduce manual errors through automation and process transactions more quickly. BSM is aimed at helping organizations meet this challenge.

A key capability of BSM is the dynamic mapping of IT assets to the business services they enable. BSM shifts the view of IT infrastructure from a topological architectural map to a model that identifies the asset-to-service linkages and allows IT to tie infrastructure events to business outcomes.

For example, you may need to understand how a change on a server impacts the related IT and business services. The services are made up of processes that effectively run the business. Mapping an asset to a service is considered critical to ensuring the continuity of business. In the past, you may have needed to know that a change to Server A could affect the SAP application. With BSM, you can understand even more details. You can learn that the SAP module for online ordering may be affected and, as a result, could impact Web sales. You would see the impact of this problem on revenue, which is important to the business.

### IT-Business Integration

ITIL v2 deals primarily with aligning IT to the business. It involves positioning technology to align with business objectives and provides a common language to facilitate communication between IT and business owners. ITIL v3 takes that a significant step further by focusing on integrating IT with the business. It blurs the distinction between IT and the business, even replacing the language of IT with the language of the business.

BSM provides a strong foundation for this IT-business integration. BSM solutions provide an enterprisewide view of the IT infrastructure that shows the relationships between infrastructure resources and the business services and business processes they support. For example, BSM solutions can map SAP and Oracle e-business software services to the components of the IT infrastructure that support these services. This integrated view shows the relationship of technology to services and business processes, thus permitting IT to make decisions based on business impact.

### Service Lifecycle Management

ITIL v2 is focused on practices for taking a modular approach to processes. Each process has its own module. The problem with this approach is that it doesn't let people think of activities in terms of the lifespan of a service. ITIL v3, in contrast, helps organizations think more strategically across the full lifespan of a service. Some of the benefits of this approach are that it:

- > Establishes the integration of business strategy with IT service strategy
- > Improves the ease of implementing and managing services for dynamic, high-risk, volatile, and rapidly changing business needs
- > Identifies the opportunities for improvement and change throughout the service lifecycle
- > Addresses the gaps and deficiencies of previous ITIL versions

1. Service Strategy	Ensures that every stage of the service lifecycle stays focused on the business case Affects what happens in the other phases Relates to all the companion process elements that follow
2. Service Design	Involves development of specifications for innovative new services or enhanced services
3. Service Transition	Subjects new or enhanced services to production-quality assurance and controlled release into production Includes testing, change management, and release management
4. Service Operation	Focuses on delivery and control process activities to achieve a highly desirable, steady state of service management on a day-to-day basis
5. Continual Service Improvement	Continues in the ITIL tradition of continual improvement

**Table 1.** ITIL v3 Service Lifecycle Stages

ITIL v3 defines five stages of the service lifecycle: service strategy, service design, service transition, service operations, and continual service improvement. The model contains the processes needed to manage services within this lifecycle structure. The objective of every stage in the service lifecycle is to produce business value. Table 1 summarizes the five stages of the model.

The ITIL v3 *Service Strategy* and *Service Design* books promote a flexible model for service provisioning using a value network approach. In developing this network, it is important to carefully examine internal and external provider capabilities. To this end, ITIL v3 devotes a significant amount of guidance to understanding service provider types, including how to analyze market spaces and provider strengths, and how to effectively create a value network and select the sourcing options that fit your business objectives.

ITIL v3 also introduces the concept of adaptable models in the entire lifecycle of practice. This is a key component of the concept called “Service Transition,” in which guidance is provided to help service providers select a fit-for-purpose model for each type of service transition that moves from design into the live environment. Adaptable models make it possible to respond quickly to rapidly changing business requirements.

The role of continual service improvement has evolved in ITIL v3 to exert influence throughout the service lifecycle by identifying triggers for improvement at every stage of service management practice. No longer viewed as the last process event in service provision, improvement is now considered a continual process that encompasses all stages of the service lifecycle.

Like ITIL v3, BSM takes a lifecycle approach to service management, implementing best-practice processes for service lifecycle management in a variety of areas. For

example, BSM solutions can provide end-to-end, closed-loop change management that extends from change requests to planning, approval, implementation, verification, and finally, to notification of successful completion.

### Key Process Changes

All former processes in ITIL remain at the center of ITIL v3 practice. Each process has been enhanced to operate in a lifecycle context, and existing gaps have been eliminated. Changes have been made to the lifecycle practice to improve the versatility of ITIL practices. Additionally, existing processes have been changed. Some examples include:

- > **Incident Management** has removed the service request from the incident process and reinstated it as a separate process called “Request Fulfillment.” This approach has been designed so it can still be used with the current technologies, but the focus of incident management is now solely on managing service disruption.
- > **Event Management** has been updated to enhance incident management activities. Event management provides formal process elements to proactively manage potential service issues before they become incidents, and to more quickly recognize issues that are incidents.
- > **Change Management** processes have been overhauled to reduce the propensity for adapting models to suit change types. Change management has been streamlined and updated to permit change while retaining the risk-mitigation elements.
- > **Release and Deployment Management** has undergone extensive changes to expand its focus to include all areas of release and deployment, including infrastructure, applications, services, and project initiatives.

There is a corresponding change in ITIL documentation from v2 to v3 to support the focus on lifecycle service management. Table 2 compares the documentation organization of the two versions.

ITIL v2 Documentation	ITIL v3 Documentation
Organized according to IT delivery sectors:	Organized according to the service lifecycle:
<p>Seven core books defining seven sets of processes covering seven IT areas:</p> <ol style="list-style-type: none"> <li>1. <i>Service Support</i></li> <li>2. <i>Service Delivery</i></li> <li>3. <i>Planning to Implement Service Management</i></li> <li>4. <i>Information Communications Technology (ICT) Infrastructure Management</i></li> <li>5. <i>Applications Management</i></li> <li>6. <i>The Business Perspective</i></li> <li>7. <i>Security</i></li> </ol>	<p>Subsumes the ITIL v2 core books into five core books:</p> <ol style="list-style-type: none"> <li>1. <i>Service Strategy</i> presents a view of ITIL that integrates business and IT so that each brings out the best in the other.</li> <li>2. <i>Service Design</i> provides guidance on the production and maintenance of IT policies, architectures, and documents for design of appropriate and innovative IT infrastructure service solutions and processes.</li> <li>3. <i>Service Transition</i> provides guidance and process activities for the transition of services into the business environment. It covers broader long-term change management role and release practices, so that risks, benefits, delivery mechanisms, and the ease of ongoing operations of service are considered.</li> <li>4. <i>Service Operation</i> introduces, explains, and details delivery and control activities to achieve operational excellence on a day-to-day basis. To ensure it integrates with the rest of the ITIL library, guidance is based on a selection of familiar service support and service delivery control points. As a result, IT will find many of the familiar processes from the ITIL v2 <i>Service Support</i> and <i>Service Delivery</i> books, updated wherever necessary.</li> <li>5. <i>Continual Service Improvement</i> focuses on the process elements involved in identifying and introducing service management improvements; also deals with issues surrounding service retirement.</li> </ol>

Table 2. Comparison of Documentation Organization

Each of the ITIL v3 core books incorporates the best of ITIL v1 and v2, as well as tested current practices for IT service management. The core practices of the service management life stages defined in the five core books are supplemented by additional, more detailed books. These topic-specific books contain more detailed content that is specific to industry, stakeholder, and practice topics. The books address specific topics related to operations and regulatory compliance in different industry sectors.

The new, supplementary books will provide guidance specific to various stakeholder viewpoints to help organizations gain further momentum in service management projects. Although the mechanisms for managing services may differ, the expected outcome remains the same: to create business value. Figure 1 illustrates the ITIL v3 model.

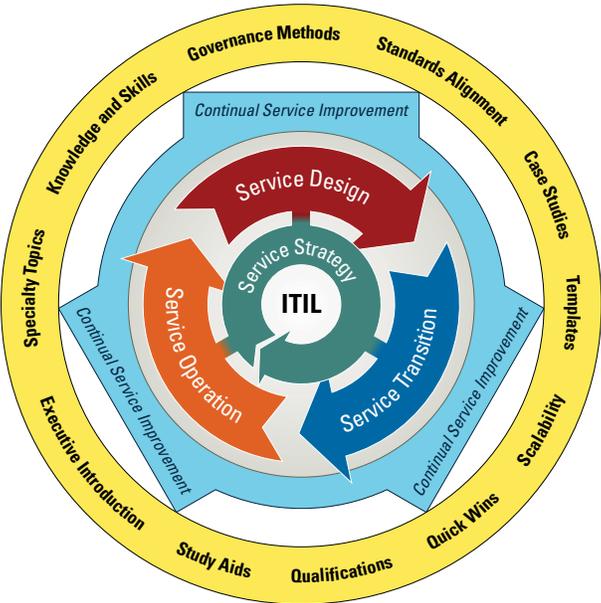


Figure 1. ITIL v3 Model

## Services as Assets

ITIL v3 introduces the concept of services as assets. A service is considered to be an asset to its consumer. Service assets consist of two entities: utility and warranty. *Utility* is the service itself, provided by a combination of people, processes, and technology. Examples include an online retail order-entry service and an online company health plan enrollment service. *Warranty* is the assurance that the utility will perform to an expected level. For example, a large online retailer's order-entry utility may warrant such factors as in/out of stock and delivery time.

A service may be consumed by internal and external customers. For example, an online order entry service may be consumed by external customers; whereas, an online enrollment service in a company health plan may be consumed by internal customers, such as employees.

In contrast to ITIL v3, ITIL v2 deals primarily with tangible assets, such as IT infrastructure components. For example, an asset's warranty information is defined in the asset's associated contractual information, and utility is generally viewed as the reason for managing an asset. ITIL v3 re-categorizes the asset information defined in ITIL v2 under either the utility or warranty category.

In ITIL v3, utility and warranty act upon each other to create asset value. As a result, assets have a direct impact on business value (because they produce something of value for the business). That something may be profit, innovation, customer satisfaction, or any other value that may drive business success.

BSM solutions support this key ITIL v3 benefit by providing insight into the business impact of services. This insight permits IT to weight the value of service assets based on their business impact, enabling IT to make informed business decisions, such as prioritizing actions, based on the weighted business value of the service assets involved.

## Quantification of ROI and Return on Value

ITIL v3 defines return in more than just money terms. It also includes such key indicators as increased customer or employee satisfaction. ITIL v3 helps businesses quantify, measure, and optimize return based on two measures: return on investment (ROI) and return on value.

The *Service Strategy* book in ITIL v3 provides guidance in defining ROI and return on value for a particular business context. This helps IT understand what ROI and return on value cover, and what they do not cover. It also helps IT determine what generates value and how the definition of value must be agreed to by both IT and business managers.

According to ITIL v3, the return on value of a proposed or ongoing incumbent project can be evaluated in eight key dimensions: competitive, financial, functional, process, relationship, strategic, technical, and/or usage values. IT managers can develop a comprehensive picture of value using these appropriate key metrics to communicate the return on value of the project they are championing.

The ITIL v3 *Service Design* book provides guidance in determining the mechanics for measuring ROI and return on value, providing insight into:

- > What to measure
- > How to measure it
- > Appropriate metrics to use
- > How to use the measurements to demonstrate achievement

BSM also supports ITIL v3 in this area. BSM permits IT to map the IT infrastructure components to the services and business processes they support. As a result, IT can focus its efforts on those services and processes that contribute to ROI or return on value, and establish priorities accordingly. What's more, IT can better gauge and demonstrate its contribution to business value.

With BSM, the ROI can be substantial in IT cost savings alone. According to Forrester, "By hitting all of the stepping stones toward BSM, Forrester estimates that companies can save as much as a third of their IT operations budget. As 76 percent of the IT budget goes to operations, firms that implement BSM can potentially save 25 percent of their overall IT budget."<sup>1</sup>

## Increased Emphasis on Being Proactive

ITIL v3 helps IT determine what triggers should initiate action. IT should not wait until an entire process is completed or a certain period of time has elapsed to determine whether a desired outcome has been achieved or whether a process can be improved. Instead, IT should understand what indicators within a process can point to potential problems and trigger action. Each book in ITIL v3 presents triggering events or conditions that can indicate potential problems or potential areas for improvement. This approach fosters a proactive, rather than reactive, approach to service management.

Like ITIL v3, BSM fosters proactive actions in a number of areas. For example, BSM solutions can monitor the IT infrastructure, determine the business impact of events, and automatically generate incident tickets for events with high business impact. This permits the IT staff to move proactively to head off incidents before they result in disruption of business-critical services.

## Elimination of Silos

Another important aspect of ITIL v3 is its increased emphasis on the elimination of putting IT processes into silos. Although ITIL v2 speaks of process integration, it defines the processes of each IT function — incident management, problem management, change management, configuration management, release management, and service desk function — in a separate chapter. This separation of processes by function does not foster process integration. Often the individual processes are well implemented, but integration across the associated service is loose or non-existent.

ITIL v3, on the other hand, re-categorizes the processes from functional area to service lifecycle stage, thereby fostering integration of processes across functions by service. Moreover, ITIL v3 recognizes that effective process integration requires that people involved in different IT disciplines keep a broad outlook. IT staffers must not only have expertise in their particular disciplines, but also understand the interaction of their areas of expertise with other areas. For example, a change manager must not only be expert in the mechanics of change operations, but also understand the implications of change in strategy and design.

Like ITIL v3, a fundamental tenet of BSM is process integration, and BSM solutions are available to integrate processes across IT functions. For example, some solutions integrate change management processes with service desk processes. The change management application automatically notifies the service desk application of impending changes, permitting the service desk to notify affected users in advance of a change. In addition, the change management application keeps the service desk informed of change status and automatically notifies the service desk upon successful change completion, closing the loop.

## What to Expect with ITIL v3

Companies that have been implementing ITIL v2 are realizing significant business benefits, including higher-quality service delivery, lower cost, and improved regulatory position. These companies are well positioned to build on their ITIL v2 successes as they move up to the next level in service management maturity through ITIL v3.

### Transitioning From ITIL v2 to ITIL v3

Now that you understand what ITIL v3 is all about, including how things evolve from ITIL v2, how does the Office of Government Commerce (OGC) recommend that you make the transition? The transition from ITIL v2 to v3 is evolutionary, rather than revolutionary. ITIL v3 involves a mindset change. It ensures that the lifecycle of a service is fully considered before implementation, eliminating the current

silos mentality and fostering better integration of IT with the business drivers, processes, and operation.

The interface between ITIL v2 and ITIL v3 is seamless, so IT organizations that have already adopted ITIL v2 do not have to reinvent the wheel to implement ITIL v3. That means any accomplishments achieved in implementing ITIL v2 are maintained in the implementation of ITIL v3.

Your transition strategy to ITIL v3 practices will largely depend on the level of maturity and investment in your current ITIL practices. The ITIL v3 development team recommends taking the same approach as you would any other service improvement initiative — an incremental approach. Everyone in your IT organization should become familiar with the ITIL v3 practices and then assess how ITIL v3 improvements can be aligned to ongoing service improvements. Because ITIL v3 contains enhanced former ITIL practices, an ideal place to start is with a review of the enhancements and consideration of the level of improvement you can leverage over time.

If your organization has not yet begun to implement ITIL, you may ask whether it is advisable to start with ITIL v2, and then move to ITIL v3. Keep in mind that there is always value in proceeding with service management improvements at any time. In any case, you should first review the new guidance in ITIL v3. During summer 2007, ITIL v3 will release the new qualification scheme for accredited ITIL training. Take advantage of the training resources available to begin the learning process for understanding the scope and basics of ITIL service management practices.

If you are now reviewing the current ITIL practices, you may continue to move along this path with the intent to pick up the ITIL v3 elements as you plan your implementation strategy. ITIL v3 encompasses the former practice elements. As a result, you can make the transition to ITIL v3 at the start if you are new to ITIL. Or, you can incorporate ITIL v3 into your improvement path if your ITIL implementation is already underway.

If you have already invested in training, there is no need to worry. The certifications continue to be relevant and you can choose to take additional courses to supplement your ITIL education to the ITIL v3 scheme.

### An Example

ITIL v3 fosters business innovation. By automating the linkage between the business strategy and the service portfolio (which contains both in-production services and future possible service capabilities), you can facilitate the identification of opportunities to innovate. With this approach, you can

greatly improve the speed at which you recognize and enable opportunities for innovation.

For example, when using a BSM solution to view all business processes, an IT employee can notice a siloed process that can be better integrated using a new service in the service portfolio. The employee can then realize that the integration of that process has the potential to revolutionize the business by reducing time to value, lowering costs, and improving business efficiency and effectiveness. The employee, working with the business community, can then integrate the process into the new component services required to support the business. As a result, the employee can then develop and implement the integrated process into the new service using the ITIL v3 service lifecycle approach along with the BSM solution. With this combination, the IT organization can deliver the business benefits at the lowest possible business risk.

## Business Benefits

A major benefit of ITIL v3 is that it enables an enterprise to take full advantage of its investment in IT. That gives you the ability to tap the full potential power of the technology and the expertise of IT professionals to make the business more innovative and valuable.

IT benefits result from this powerful combination because IT professionals enjoy a far richer and more satisfying role in the enterprise. What's more, their visibility and perceived value in the enterprise increases, as business managers begin to view IT as a business value creator.

Business managers can also benefit from a much closer relationship with IT and a better understanding of IT's ability to leverage technology to innovate the business. Through a close partnership with IT, business managers can implement new business processes that increase their competitive edge. And, through technology innovation, they can open exciting new, previously unreachable market areas.

## Conclusion

BSM incorporates ITIL v2 in an integrated manner, and even has some of the new elements in ITIL v3 today. The combination of BSM and ITIL v3 helps IT advance in IT service management maturity level through the integration of IT with the business and the transition to service lifecycle management.

Because ITIL v3 is an evolution of ITIL v2, organizations that have already begun their ITIL implementation can easily move to ITIL v3 without losing any of the effort or business benefits associated with their existing efforts. In addition, they gain the additional business benefits made possible by ITIL v3 through the integration of IT with the business and the establishment of IT as a business partner. In this way, organizations can unleash the full potential of their IT resources to increase their competitive edge.

For more information about ITIL, visit [www.bmc.com/itil](http://www.bmc.com/itil) and [http://www.ogc.gov.uk/guidance\\_itil.asp](http://www.ogc.gov.uk/guidance_itil.asp).

## Endnotes

- 1 Business Service Management: Early Birds Are Catching The Worm, But IT Still Doesn't Get It, Peter O'Neill, Best Practices, Forrester February 2007



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## About BMC Software

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