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ISO 20000: What's an Organization to Do?

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Abstract

International standards related to IT Service Management permit organizations worldwide to collaborate and they provide valuable guidelines that help establish the credibility of companies. A new standard, ISO 20000, which is now available, allows an organization to demonstrate to its customers and investors that it operates with business integrity and security, and that it fosters a culture of continual quality improvement in IT Service Management. Why is this so important? It is because achieving ISO 20000 certification can help give companies a competitive edge over those companies that don't meet this standard.

The release of ISO 20000 raises a question to organizations around the world: What does the organization need to do today with respect to ISO 20000? This paper is intended to help answer that question by:

> Describing the evolution of ISO 20000
> Providing an overview of ISO 20000
> Discussing the potential impact of ISO 20000 on organizations
> Reviewing the need for automation to meet the requirements of ISO 20000 and the criteria that an automation solution should meet
> Suggesting actions an organization can take now to prepare for ISO 20000 certification

A Natural Next Step

Organizations focused on continual quality improvement in IT Service Management, will benefit by following the latest standard from the International Organization for Standards (ISO) — ISO 20000. This new standard promotes the adoption of an integrated process approach to the effective delivery of IT services and sets guidelines for quality in IT service management (ITSM). (See Figure 1.) The release of ISO 20000 demonstrates that IT has reached a point in its maturity where few organizations could survive without it. Documentation defining this standard has been released in 2005, and global certification is expected to begin in 2006.

The new standard is based on the British standard BS 15000 and is closely aligned with the IT Infrastructure Library (ITIL®). ISO 20000 is a code that provides a yardstick for measuring and validating an organization's success in implementing best practices as defined by ITIL. Those organizations that have achieved or are pursuing achievement of BS 15000 and those organizations that are implementing ITIL will find themselves already on the path to ISO 20000, and consequently able to increase their credibility as organizations.

ISO 20000, which replaces BS 15000, provides a standardized way of verifying that an organization has successfully adopted IT Service Management best practices as defined by ITIL, which has been a de facto standard for service management for almost 20 years. BS 15000 — a British standard first issued in 2000 to promote the adoption of an integrated process approach to the effective delivery of IS services — is based on ITIL. And ISO 20000 was created via a fast track from BS 15000. Other standards, practices, and models may also be relevant to ISO 20000. This paper, however, focuses on the relevance of key ones — ITIL, COBIT, and BS 15000.

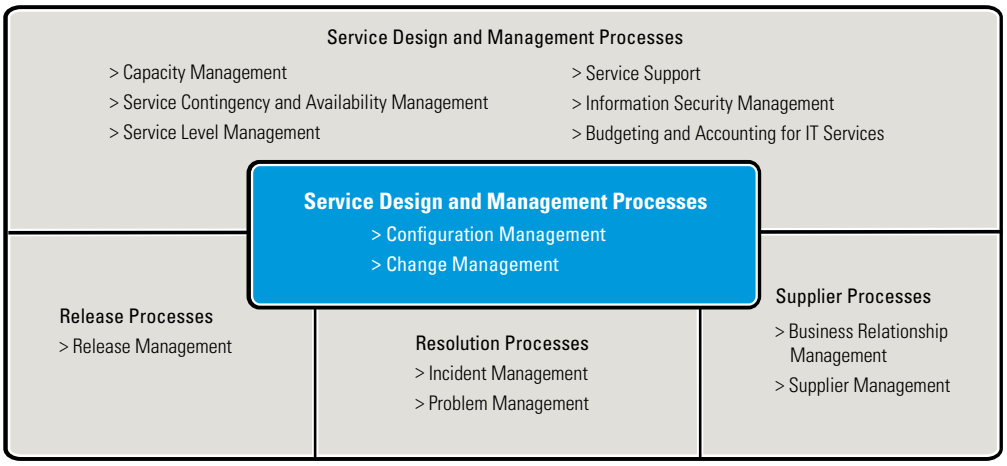


Figure 1. ISO 20000 Service Management Processes

ITIL

ITIL consists of a coherent, integrated set of seven books, each defining best practice guidelines for a specific area of IT service management. The guidelines are intended to be adapted by each organization to fit its specific needs. ITIL is owned and maintained by the U.K. Office of Government and Commerce (OGC).

Figure 2 shows the IT process areas defined in the ITIL guidelines and their interrelationships.

COBIT

IT controls are becoming a necessary part of doing business in just about all industries and are essential in implementing ITIL, and hence in achieving ISO 20000 compliance. The Institute of Chartered Accountants in England and Wales, for example, has published its final guidance on the implementation of the internal control requirements of the Combined Code on Corporate Governance. This guide, entitled "Internal Control: Guidance for Directors on the Combined Code," has the support and endorsement of the London Stock Exchange, which has stated that, "A company's system of internal control has a key role in the management of risks that are significant to the fulfillment of its business objectives." In addition, the Public Company Accounting Oversight Board (PCAOB) in the U.S., which was established by the Sarbanes-Oxley Act of 2002 to oversee the audits of public companies, specifically mentions the importance of IT systems and IT general controls in its auditing guidelines dated March 9, 2004.

The IT Governance Institute (ITGI) has constructed an IT-focused control framework called Control Objectives for Information and related Technology (COBIT) that provides specific IT governance guidelines to help organizations implement controls. COBIT establishes a set of 34 high-level IT control objectives, 13 of which rely on ITIL directly. The objectives are shown in Table 1, and are categorized by domain.

BS 15000

BS 15000, closely aligned with ITIL, defines a set of minimum requirements against which an organization can be assessed for effective IT service management processes. It provides a level of quality for those activities that can be audited. BS 15000 encompasses five key process groups: service delivery processes, relationship processes, resolution processes, release processes, and control processes, most of which are defined in detail within ITIL.

A Closer Look at ISO 20000

In May 2005, members of the ISO and the International Electrotechnical Commission (IEC) voted to make BS 15000 the basis for ISO 20000. This took the foundation of BS 15000 to the next level, as it set the stage for an international standard. The nature of the business relationship between the service provider and the business will determine how the requirements in Part 1 of ISO 20000 are to be implemented to meet the overall objectives. The service provider may be internal or external to the business. The ultimate goal of ISO 20000 is to:

> Reduce operational exposure to risk
> Meet contractual requirements
> Demonstrate service quality

The ISO expects first certifications to be achieved in 2006. It is expected that organizations with BS 15000 certification will be the first to seek ISO 20000 certification. (Those organizations are all outside the U.S.) It is also anticipated that other organizations around the world, including those in the U.S., will follow, most probably led by companies in industries in which IT plays a critical business role.

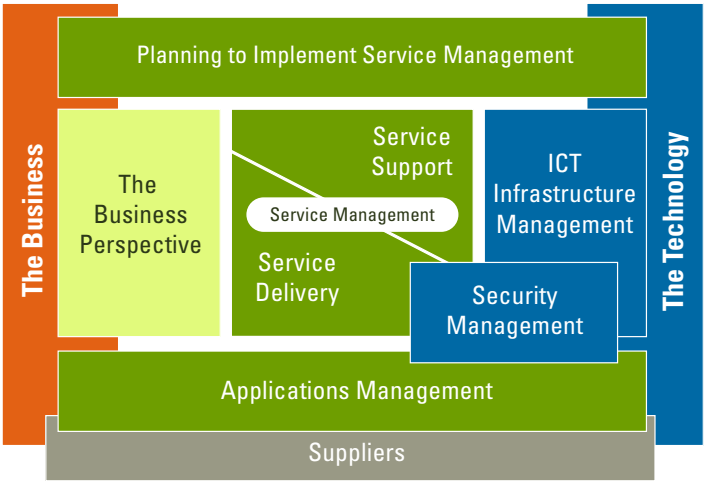


Figure 2. IT Process Areas

ID	PLANNING AN ORGANIZATION (PO)	ID	DELIVERY AND SUPPORT (DS)
PO1	Define a strategic IT plan	DS1	Define and manage service levels
PO2	Define the information architecture	DS2	Manage third-party services
PO3	Determine the technological direction	DS3	Manage performance and capacity
PO4	Define the IT organization and relationships	DS4	Ensure continual service
PO5	Manage the IT investment	DS5	Ensure systems security
PO6	Communicate management aims and direction	DS6	Identify and allocate costs
PO7	Manage human resources	DS7	Educate and train users
PO8	Ensure compliance with external requirements	DS8	Assist and advise customers
PO9	Assess risks	DS9	Manage the configuration
PO10	Manage projects	DS10	Manage problems and incidents
PO11	Manage quality	DS11	Manage data
ID	ACQUISITION AND IMPLEMENTATION (AI)	DS12	Manage facilities
AI1	Identify automated solutions	DS13	Manage operations
AI2	Acquire and maintain application software	ID	MONITORING (M)
AI3	Acquire and maintain technology infrastructure	M1	Monitor the processes
AI4	Develop and maintain procedures	M2	Assess internal control adequacy
AI5	Install and accredit systems	M3	Obtain independent assurance
AI6	Manage changes	M4	Provide for independent audit

Table 1. COBIT IT Control Objectives

ISO 20000 content is based on the following documents within BS 15000:

> Part One – Includes a set of minimum requirements and promotes the adoption of an integrated process approach to effectively deliver managed services to meet the business and customer requirements.

> Part Two – Covers a "Code of Practice for Service Management," which distills key elements of ITIL best practices. This document is intended to help organizations establish processes to achieve the objectives of Part 1.

The Impact of ISO 20000

What does an organization need to do regarding ISO 20000? Should it seek ISO 20000 certification? If it is not seeking certification, what, if anything, should an organization do based on this new standard? This section should help answer those questions.

Should an Organization Seek Certification?

As mentioned earlier, ISO 20000 certification provides verification that an organization is deploying IT Service Management best practices as evidenced by an independent, external evaluation against a formal standard that has been carried out by an approved audit organization. This level of validation can help a company remain more competitive.

In determining whether to seek ISO 20000 certification, an organization should consider the following:

> ISO 20000 is especially important to organizations in industries in which quality IT services are essential to business success, such as — but not limited to — the financial services, utilities, and health services industries. Certification permits these organizations to demonstrate to their stakeholders and customers that they have well-managed IT environments.

> ISO 20000 is relevant to organizations that provide managed services and outsourcing of IT services. Certification permits managed services organizations to assure clients that their IT environments will be well managed, and enables outsourcing organizations to assure clients that they will receive high-quality IT services. These service providers must prove that they have documented all five key areas within ISO 20000 and that the requirements of the standard are being adhered to. Documentation must include Service Management policies and plans, Service Level Agreements, processes and procedures required by ISO 20000, and any records required by this standard.

> Organizations should consider the implications of certification with respect to regulatory compliance. Today, organizations need to demonstrate compliance with an increasing number of government regulations. Many of these regulations, such as Sarbanes-Oxley, and the Health Insurance Portability and Accountability Act of 1996 (HIPAA) in the U.S., deal specifically with IT services and IT Service Management (ITSM). Currently, auditors do not require standards certification as proof of compliance, but in the future, they may. Because ISO 20000 deals specifically with the quality of ITSM, it could provide an international standard that auditors can use to determine compliance.

ISO 20000 certification will be granted only to organizations that have an ITSM operation, and will certify only the ITSM operation in those organizations. Certification will not be granted to products or to best practice advisory services offered by consulting organizations. Certification may become a requirement to do business with certain organizations, such as government agencies or outsourcers.

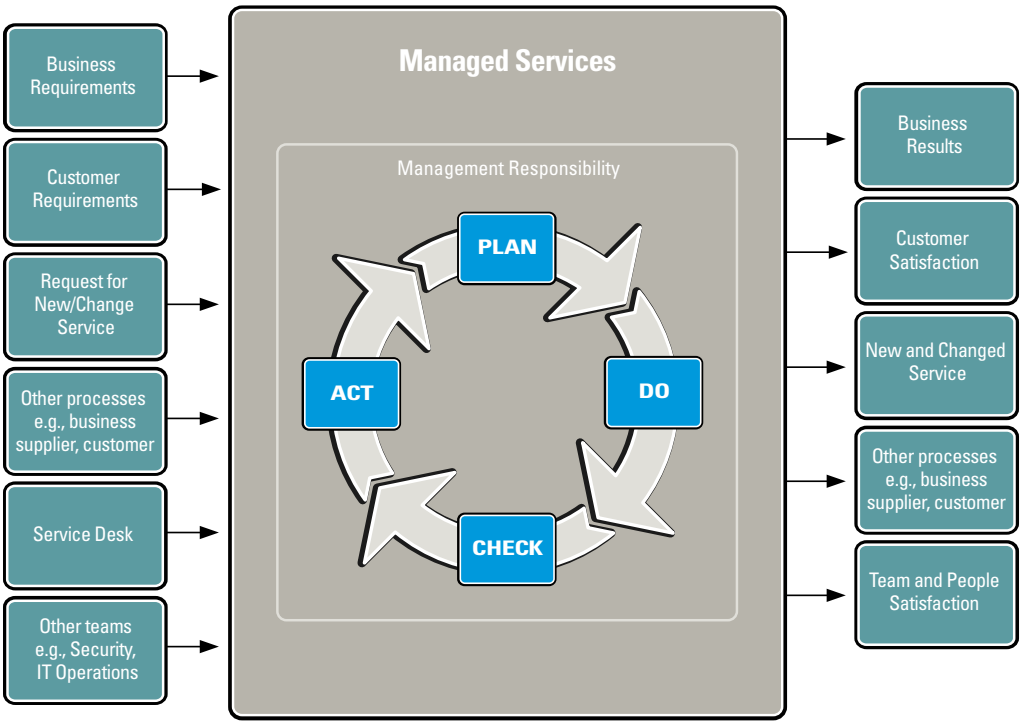
For Organizations Not Seeking Certification — Use ISO 20000 as a Guide

Even if an organization does not wish to initially seek certification, ISO 20000 documentation provides a valuable (and inexpensive) resource that can be used by organizations that have adopted ITIL and are implementing or plan to implement ITSM processes based on ITIL guidelines. It provides a standardized way for these organizations to measure their progress in "ITIL-izing" ITSM. Also, by striving to meet the requirements of ISO 20000, these organizations will be able to leverage their efforts and investments if they decide to pursue ISO 20000 certification later, or just want to ensure that they have implemented a world-class service.

Importance of Continual Improvement

All organizations should keep in mind that a key aspect of ITIL, and hence ISO 20000, is validation of continual improvement in the quality of ITSM. The model of continual quality improvement is based on W. Edwards Deming's concept of Plan-Do-Check-Act, originally established in the manufacturing industry. (See Figure 3.)

An important factor in pursuing continual improvement is to conduct regular "health checks" on the quality of ITSM. ISO 20000 provides a way to check how well an organization is doing in its quest to continually improve ITSM. The organization can use ISO 20000 (and COBIT) to define and measure achievement of each new level of improvement as it grows in service maturity.



Provided by the Institute of IT Service Management

Figure 3. Continual quality improvement

Importance of Automation to ISO 20000

Today's IT organizations must manage complexity, both in their IT infrastructures and in the ITSM processes required to manage the infrastructures. The already high complexity of IT infrastructures is growing as organizations implement multitier architectures, services-oriented architectures, and virtualization technologies. The Internet has further increased complexity, adding many more users, both inside and outside the walls of the enterprise. These include employees, customers, and business partners.

To manage these infrastructures, many organizations are adopting ITIL guidelines to establish best-practice ITSM processes. ITIL requires the establishment of processes in multiple ITSM disciplines and the integration of these processes across disciplines. That's a daunting task. What's more, the practice of continual improvement — which is fundamental to ITIL and ISO 20000 — is by no means a trivial undertaking.

In this exceedingly complex IT environment, manual processes are not viable. Organizations need to implement systems-based automation tools and solutions to help them manage complex environments.

Advantages of Automation

Automation delivers a number of important advantages:

- **Helpsensure the integration of processes.** While manual processes tend to demarcate processes by permitting people to preserve "organizational turf," automation fosters the integration of processes.
- **Ensures the consistency and repeatability of processes.** People tend to "adapt" manual processes over time to suit their own needs, resulting in inconsistencies. Automation, on the other hand, enables the establishment of processes that are consistent and repeatable, and it enforces their use.
- **Permits faster implementation of ITIL and potentially faster ISO 20000 certification.** Automation solutions that are based on ITIL can help an organization quickly implement ITIL best practices, accelerating the time to reach ISO 20000 achievement.
- **Helps reduce costs.** Automation can help reduce staff costs by performing routine, repetitive functions that would otherwise soak up much staff time, and by reducing service outages.
- **Facilitates regulatory compliance.** Automation helps organizations establish and enforce required best practices and provides an audit trail to enable organizations to achieve and demonstrate compliance.

Selecting the Right Automation Solution

Because of the importance of automation in achieving ISO 20000, organizations should exercise great care in selecting an automation solution. This section presents some guidelines for making that choice.

Support ITIL

Because ITIL is fundamental to ISO 20000, it's important to select an automation solution that supports ITIL processes. The solution should support processes that span all IT service management disciplines — asset management, change and configuration management, incident and problem management, release management, capacity management, availability, financial management, and service level management. Suites make more financial sense than "best-of-breed" applications that need considerable manual integration work.

In addition, one of the major requirements of ITIL is integrating processes across disciplines. Look for a solution that fully integrates the various ITIL processes from both a process and a data perspective, rather than merely providing field-to-field mapping.

Maintain a CMDB

Another important consideration is to look for an automation solution that provides a single "source of reference" across all IT areas. This requires a solution that uses a configuration management database (CMDB) to maintain information on the IT environment.

The CMDB contains detailed information on all ITIL configuration items (CIs) in the infrastructure, including each item's location, configuration, and physical and logical interrelationships with other items. The CMDB ensures that all processes are working from consistent and accurate data. Because of the complexity and fluidity of the IT infrastructure, look for a solution that automatically populates the CMDB and updates it whenever changes are made.

Manage IT from a Business Perspective

One of the three major goals of ISO 20000 is to improve the business alignment of IT services. To meet this goal, the IT staff must manage IT services from a business perspective; that is, perform Business Service Management (BSM). Consequently, it's important to look for an automation solution that supports BSM. One of the key requirements generated by BSM is that the solution enables the IT staff to understand the relationships of the IT infrastructure components to the business services they support. It should also indicate the business impact of events such as performance slowdowns or component failures that occur in the IT infrastructure. Only in this way can the staff make decisions based on business impact and business priorities.

What to Do Next

It's important to realize that ISO 20000 is not a destination, but rather a journey in which IT strives to achieve true business service management and grow continually in ITSM maturity. As a result, whether or not an organization is seeking ISO 20000 certification, it should establish a culture of continual improvement in ITSM and seek to implement all ITIL processes that are pertinent to the business. This section presents some guidelines that will help facilitate progress.

Become Familiar with Pertinent Documents

The first thing the IT staff should do is gain an understanding of ISO 20000, and if it has not already done so, the IT staff should also become familiar with ITIL and COBIT. The documentation described previously in this paper can be used as an information source.

Assess the Current Situation

Next, the staff should assess the current situation and determine how the organization measures up to ISO 20000. This will provide a good idea of how well the organization is implementing ITIL. ISO 20000 Part 1 and Part 2 can be used to gain an understanding of what is required.

Initiate an Improvement Program

The IT staff can use the initial ISO 20000 assessment as a "health check" mechanism to kick-start an improvement program. The staff should determine which steps to take next to improve the current situation, using the information obtained in the assessment to identify those areas that have the greatest potential for improvement. Those organizations that are already in the process of implementing ITIL can leverage their investment in ITIL to accelerate progress.

Establish a Culture of Continual Improvement

It's important to keep in mind that the ISO 20000 journey is an iterative process of continual improvement and cannot be completed in one giant step. Consequently, once the first steps have been successfully completed, the staff can re-examine the initial assessment information to determine the next most promising areas to address. The staff should proceed in an iterative fashion, growing in maturity and measuring progress along the way, using the ISO 20000 standard, ITIL, and COBIT IT control objectives.

Conclusion

Although ISO 20000 documentation has only recently been released and ISO 20000 certification has not yet begun, it is important that organizations begin now to assess the potential impact of the standard and determine whether to seek certification. In any case, organizations implementing or planning to implement ITIL to improve the quality of their IT service delivery can use ISO 20000 to guide and gauge their progress.

What's most important to understand about ISO 20000 and ITIL is that they both necessitate continual improvement, which can increase an organization's credibility and competitiveness.

Recommended References

ITIL: www.itil.co.uk/

BMC Software solutions: www.bmc.com/itil

COBIT:
www.isaca.org/Template.cfm?Section=COBIT_Online&TEmplate=/ContentManagement/ContentDisplay.cfm&ContentID=15633

BS ISO/IEC 20000-1:2005 and BS ISO/IEC 20000-2:2005:
www.bsi-global.com/ICT/Service/bs15000-1.xalter

The Differences between BS 15000 and BS ISO/IEC 20000: www.bsi-global.com/ICT/Service/bip0039.xalter

ISO 20000 Part 1: www.bsi-global.com/ICT/Service/bs15000-1.xalter

ISO 20000 Part 2: www.bsi-global.com/ICT/Service/bs15000-2.xalter

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Ken Turbitt, best practices director for BMC, has broad experience in best practices management, IT, and consulting; has held an ISEB ITIL Manager/Masters qualification for more than ten years; and has been a Gartner-qualified TCO consultant.