IBM

IBM Service Management: Practical solutions for today based on 25 years of continuous thought leadership.

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IBM Service Management

IBM has developed thought leadership to improve the "state of the art" in service management for the last 25 years, and has supported others in their efforts as well. In addition to the advancement of management disciplines and technologies, we recognized early on that acceptance of common practices and standards is vital to achieving improved value from information technology (IT). Advances in technologies and management disciplines provide the greatest value once they become part of and extend the body of generally accepted practices and open standards. IBM supports the advancement of practices and open standards such as ITIL® (the IT Infrastructure Library®), COBIT (Control Objectives for Information Technology), ISO IEC 20000 and Carnegie Mellon University's e-SCM (the e-Sourcing Capability Model). The fundamental characteristics of service management require integration and agreement on standards — not only between tools and roles within IT, but also among organizations and even industries.

IT service management is the integrated set of activities required to ensure the cost and quality of IT services valued by the customer. It is the management of customer-valued IT capabilities through effective processes, organization, information and technology, including:

- *Aligning IT with business objectives*
- *Managing IT services and solutions throughout their lifecycles*
- *Service management processes like those described in ISO IEC 20000, ITIL and the Process Reference Model for IT.*

IBM Service Management and the ITIL heritage

Many companies are surprised to learn of IBM's long history of support and commitment to the development of industry-accepted practices, models and standards such as ITIL, the e-SCM (from Carnegie Mellon University's Information Technology Services Qualification Center [ITsqc]), COBIT and the new international standard ISO IEC 20000.

The initial ITIL project was commissioned in the late 1980s to document best practices for managing IT services.

IBM made significant contributions to the initial ITIL project, including providing its Information Systems Management Architecture (ISMA) and other IT education materials.

IBM has responded to our own needs as well as the needs of our clients by developing the open reference models and architectures that we have found are required when planning, designing and implementing service management improvements.

IBM contributed the Information Systems Management Architecture (ISMA) to the initial ITIL project, which was commissioned to document best practices for managing IT services in the late 1980s. The focus of ITIL Version 1 was on systems management. In addition to the architecture, we contributed the "yellow books," which documented the architecture, along with associated IT education materials to enhance the quality of the original project. The "yellow books" that were used as key input to ITIL Version 1 documented the best practices that we had developed earlier in the 1970s, based on our own experience in our own commercial data centers. These books described "A Management System for the Information Business." Some of the practices covered included:

- *Managing IT services, IT processes, the IT organization, technology and information*
- *The business perspective and the management perspective*
- *Configuration, change and release management*
- *Project management*
- *Problem control and management*
- *Service level management and service marketing*
- *Availability management and the CFIA (Component Failure Impact Analysis)*
- *Capacity management*
- *Financial management*
- *Infrastructure management*
- *Application management*
- *The management system*
- *IT services*
- *IT systems planning and monitoring*
- *Process and management system assessments, assessment techniques and audit planning.*

In addition to its contributions to Version 1 of ITIL, IBM contributed to the authoring, quality reviews and project management of ITIL Version 2, the focus of which was on process management practices.

IBM contributed in many ways to ITIL Version 2, including authoring, quality reviews, project management and additional support through the IT Service Management Forum. The focus of Version 2 was on process management practices required to enable service management (OGC, Wikipedia). The ITIL service support and delivery publications contain significant contributions from IBM. The ITIL application management book, co-written by authors from IBM and Microsoft®, is the basis for the lifecycle concept in ITIL Version 3. It lays the basic groundwork for how to integrate service management practices throughout the solution lifecycle.

- *Application management and best practices for managing the value, delivery and lifecycle of service management solutions (OGC, Wikipedia)*
- *Best practices for supporting IT services (OGC, Wikipedia)*
- *Best practices for controlling and delivering IT services (OGC, Wikipedia)*
- *Best practices for managing service assets to control service management costs (OGC, Wikipedia)*
- *Best practices for providing a resilient infrastructure as a basis for service management (OGC, Wikipedia)*
- *Best practices for making the service secure based on the customer's service level requirements (OGC, Wikipedia)*

IBM continues its commitment to supporting the development, maintenance and updating of industry-accepted best practices through various measures, including participation in the ITIL Advisory Group.

The focus of ITIL Version 3 is on the lifecycle concept of IT services and solutions.

Various kinds of intellectual capital make up "best practices," from business models and frameworks to sample service level agreements and other, more transient, kinds of guidance.

IBM supports the development of updates and refreshes to industry-accepted best practices, including supporting the ITIL Advisory Group through quality reviews and other briefings. ITIL Version 3 focuses on best practices throughout the service lifecycle. It focuses essentially on the service and solution lifecycle management, including five core volumes:

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

Version 3 focuses on the lifecycle concept of IT services and solutions. Some of our input into the planning process for Version 3 included recommending and supporting the lifecycle focus, based on key concepts in the application management book, as well as restructuring the library to separate the various kinds of intellectual capital (IC) by their use. Inside IBM we manage IC methods separately from examples harvested from individual projects. Methods, processes, and business models and frameworks are more stable and can be managed in a different way and in a different system as compared with IC with a more limited "shelf life" and value. For instance, the core volumes should reflect the more stable practices, while other tranches should reflect more transient intellectual capital, such as sample service level agreements (SLAs), discussion of process automation options and other guidance. This would allow the primary books to focus on the true core set of agreed-to and accepted practices, with another place in the library reserved for other, more detailed and prescriptive, guidance.

IBM has found that IT service management has implications that extend beyond IT, affecting virtually every management discipline within the business.

IBM thought leaders also serve on the ITIL Advisory Group and other working groups to contribute as the need arises. Our view is that ITIL is a valuable set of publications that promote best practices in service management. From a strategic outsourcing perspective, ITIL is requested by many of IBM's clients all around the globe. Companies that are implementing improvements to their service management capabilities consider ITIL a good place to start.

IBM Service Management—beyond ITIL

We have found that the full value proposition offered by IT service management has implications throughout IT and impacts every management discipline within the business. Our view of IT service management has evolved to a concept that we call "IBM Service Management" because, as we get further into service excellence, we find that there are clear patterns to the adoption of service management processes.

- *IT systems management*
- *IT application management*
- *IT service management*
- *Managing business processes and services*

Many organizations are becoming less enamored with the concept of process maturity, in particular the implied lack of appropriate value or business alignment at the lower levels. A far more important idea has emerged: that enhancing the range and depth of service management capability (including the level of integration and collaboration with your partners) directly impacts value to the business. Both IT's value and cost to the business are more highly correlated with integration and collaboration across management domains than with the maturity of any one specific process. Process maturity assessments are still highly valuable in diagnosing and improving processes, but

The degree of integration and collaboration across management domains may have more impact on IT's value and cost to the business than the maturity of any one specific process.

To effectively drive change within an organization, service management must be closely tied to project management and governance.

strategic planning should focus more on the integration and collaboration required for the overall service management capability than on an approach that views each process as an independent effort. Rather than just process maturity, service management capability needs to be focused on adding value to the customer through improved overall capability based on enhanced integration and collaboration.

Service management is a complex system and requires collaboration across management domains to provide new business value. Service management looks at the business of IT from the customer's perspective.

Unfortunately, for many companies, service management has been a mere arm being waved by a few enthusiasts. Service management will remain arm-waving until it is married to project management and the governance changes required to drive complex change into the organization. Planning, design and implementation methods are required to enable project management to turn service management from wishful and idealistic thinking into business value. Governance is required to promote the desired behavior and the investment required to direct and control IT. Governance is required to establish the decision rights and accountability framework that "glues" the management capabilities together and drives the desired behavior in IT. Governance helps ensure that IT functions as a provider of valued services to customers, not just as an internal maintenance organization.

We have found that, as we drive improvements to service management internally and as we help our clients with the same issues, we must engage every capability we have. IBM Software Group teams with IBM Global Services on a regular basis to push the boundaries of process excellence. We have found that the best results arise from combining the different perspectives of product developers, service delivery teams, IT management consultants and

The combined expertise and perspectives of different kinds of subject matter experts, from product developers to business process consultants, are key to promoting end-to-end service and asset management excellence.

business process consultants to collaboratively promote end-to-end service and asset management excellence. The different types of subject matter expertise and advanced software functionality require full participation from many different areas across many management domains. It is no longer possible that one "expert" can provide all the value. IBM Service Management and Governance is driven by the breadth of IBM capabilities collaborating to add value to our clients. We believe that this is one of the core concepts critical for any IT organization that desires to improve service management capabilities—a recognition that valuable improvements will require changes to governance resulting in improved collaboration across management domains to add value to your customers.

IBM services and products enable end-to-end service and asset management. Having all asset classes—both business and IT—managed and fully integrated in the same management system enables application convergence as well as business and IT synergy. IT assets benefit from the same business process discipline that enterprise assets rely on. IBM offers an end-to-end capability to help: IBM Tivoli® software and IBM Global Services for enterprise asset management, IT asset management and IT service management. IBM Tivoli software provides the core functionality required by service management as well as the service-oriented architecture (SOA)-style integration platform for building out the service management capability with other technologies.

Service management is an evolving mindset shift that progresses from focusing on making a siloed infrastructure available to making applications available, to establishing process-based disciplines, to providing valuable IT services that support well-conceived business processes and business services.

IBM currently has thousands of ITIL-certified staff with a variety of skills, including expertise in financial management, service desk, service delivery, outsourced operations, capacity management, incident, problem, change, release, event management and monitoring design, business resilience, server,

IBM has thousands of certified consultants, architects, specialists, project managers, service delivery managers, developers, program managers and other key roles that collaborate in a global ITIL Interest Group as well as a global IT Service Management Community of Practice.

In addition to ITIL, IBM supports all efforts to promote best practices in service management—including the COBIT framework.

network, storage, facilities, user services and other ITIL practices. IBM staff includes OGC IAG members (the ITIL Advisory Group within the UK's Office of Government Commerce), ITIL authors, members of various itSMF (IT Service Management Forum) advisory boards and committee positions, education providers, consultants and developers. IBM also maintains strategic partnerships with leading vendors in IT service management.

IBM supports all efforts to promote service management best practices. In addition to ITIL, here are some of the other initiatives that we support:

IBM and COBIT

IBM embraces the COBIT framework to promote more efficient IT governance and controls management. IBM is proud to be a global sponsor of COBIT and is pleased to be offering products and services related to IT governance and controls management, which are based on this valuable set of internationally recognized best practices. IBM has a long history of cooperation and support of IT process improvement with ISACA/ITGI (Information Systems Audit and Control Association and the IT Governance Institute, respectively) and offers COBIT-based strategies in business services and software. IBM sponsored the development of the COBIT Management Guidelines and leverages their use in service management strategy, planning and design services depending on client requirements and scope. The most recent of COBIT-licensed control catalogs, based on the latest editions of COBIT, are available in the IBM Workplace™ for Business Controls and Reporting software product. IBM has been involved in IT governance for many years, and we provide solutions to help executive management in IT organizations meet their goals in a compliance-driven world.

IBM offers both COBIT assessment services as well as the inclusion of consid-

The service management lifecycle leverages several sources of accepted practices, including COBIT and ITIL.

erations for COBIT Control Objectives in our service management consulting. COBIT, as well as ITIL and other sources of accepted practices, are leveraged throughout the service management lifecycle. Service management strategy and planning, design and implementation all require consideration for control objectives and common audit requirements.

IBM and ISO IEC 20000

ISO IEC 20000 is an international standard for the most common service management capabilities. ISO IEC 20000 is based on BS 15000 and the same practices referred to in ITIL. IBM supports and contributes to the individual national standards bodies that, in turn, contribute to the international standards bodies. Our position is that well-crafted standards advance the industry. Valuable innovation is always an outgrowth from accepted practices and standards. This standard is useful in a number of different contexts. Various organizations are offering ISO IEC 20000 certification schemes and auditing services.

The international standard for service management capabilities is embodied in ISO IEC 20000.

- *Depending on market acceptance and the value placed on certifications, commercial service providers may seek to become ISO IEC 20000 certified. IBM does not provide auditing or certification services, but we can help with service management assessment, planning, design and implementation services that include consideration of this and other standards.*
- *Internal IT organizations may seek to leverage this standard as a good set of service management guiding principles, without seeking certification. These IT organizations are seeking guidance regarding the service-management principles that are essential for them to get right. IBM service management consulting services leverage this standard for guiding principles as a basis for service management design.*
- *Shared service providers may seek to leverage ISO IEC 20000 either as*

a good set of accepted guiding principles or to pursue certification by an accredited auditing firm. As mentioned previously, while IBM does not offer auditing or certification services, we can help with service management consulting services that leverage this and other standards.

IBM and Services Science, Management and Engineering

One of the most significant economic changes in the last 10,000 years was the shift from agrarian economies to economies based on manufacturing. We are now in the midst of a similar fundamental change in the world's economy, from manufacturing to services. As the world's economy shifts from primarily manufacturing based to services based, there is a need for service innovations like never before. IBM's initiative for <u>SSME</u> (Services Science, Management & Engineering) is a top-level initiative to develop service management within academic curricula. SSME is "the application of scientific, management, and engineering disciplines to tasks that one organization beneficially performs for and with another ('services')." This effort is similar to IBM's investment in computer sciences in the 1950s. SSME is a multidisciplinary combination of people, technology and business value. One of the main things inhibiting the industry's ability to leverage the true potential of technology is our inability to create the organizational change required to drive value fast enough for all the stakeholders affected by the change. University of California, Berkeley began teaching the first explicitly named "Service Science" course in the spring of 2006. In the fall of 2006, The University of North Carolina was the first university to launch a master's-level curriculum in SSME.

The world's shifting economy makes service innovations more essential than ever before.

The main inhibitor to fully leveraging the true potential of technology is the fact that organizational change doesn't usually happen quickly enough to drive value for all affected stakeholders.

- *Governments need to make service innovation a priority—GDP growth depends on it.*
- *Businesses need to make systematic approaches to service innovation a priority—revenue and profit growth depend on it.*
- *Academics need to bridge discipline silos—service innovation is multidisciplinary—students' futures depend on it.*

IBM and the Carnegie Mellon University e-SCM
IBM is a significant supporter and thought-leadership contributor to the Carnegie Mellon University's Information Technology Services Qualification Center (ITSqc), which jointly and publicly created a complementary, first-of-its-kind set of guidelines for service providers and clients: http://itsqc.cs.cmu.edu/.

IBM and the MIT Sloan School of Research – Center for Information Systems Research
IBM is a research patron of the MIT SLOAN School of Research in support of that school's efforts to advance IT management and service management sciences. The Center for Information Systems Research (CISR) conducts field-based research on issues related to the management and use of IT in complex organizations. This relationship helps provide CISR funding as well as input and feedback on the research agenda and results. Sponsors and patrons receive early access to research results, interaction with researchers and peers from other organizations, and other benefits. Sponsors and patrons are typically large multinational corporations with leading-edge IT capabilities, or public sector organizations that are equivalent in size and IT capabilities.

IBM sponsors the MIT Center for Information Systems Research for the discovery and investigation of leading practices regarding how complex organizations use and manage IT.

IBM and Lean Sigma
IBM has also innovated with the development of new service management improvement concepts, such as combining our Global Business Services and IBM Outsourcing Services Six Sigma Practices and Lean Management Practices into a service management-focused Lean Sigma capability. We use this approach when we have in place mature, established and measurable processes that need improvements to satisfy more challenging customer requirements. Established and measurable processes don't always serve customers in the best way — process is not service. So we apply a combination of

IBM has combined Six Sigma and Lean Management Practices into a service management-focused capability called Lean Sigma.

An essential foundation for service management needs to start with a rigorously engineered model describing the inner workings of and relationships between processes.

The business of IT executive workshop helps clients quickly examine the costs, capabilities and value of the various business components that make up their IT infrastructure.

Lean and Sigma methods to understand the voice of the customer, understand service quality defects and "Lean-out" the services, and apply Sigma disciplines to remove defects. What we have recognized is that improving IT services is not a technology issue. It is a business issue.

IBM's internal development

- *The Process Reference Model for IT is a process model that includes considerations for ITIL, COBIT, RUP (IBM Rational® Unified Process), CMMi (Capability Maturity Model Integration) and other industry-accepted practices. We found that we had to have a comprehensive and rigorously engineered process model that describes the inner workings of and relationships between all these processes as an essential foundation for service management. It is not the end, but rather the beginning, of a successful service management improvement effort. The current version continues to be enhanced as new views on best practices evolve.*

- *ITUP—The IBM Tivoli Unified Process, a companion to RUP, is an open set of intellectual capital that helps to make these IT management practices actionable. ITUP clarifies the processes, activities, roles, information work products, tools and mappings to other reference models that everyone needs when they get serious about service management. ITUP-C is also available. ITUP-C contains detailed and editable operational documentation for service management processes, roles, tools and information work products.*

- *The IBM Component Business Model™ for the business of IT is an IT business model designed to help the strategic planning necessary to align IT with business objectives—quickly. We offer the business of IT executive workshop to help clients quickly look at the costs, capabilities and value of the various business components within IT. This quickly assembled but comprehensive IT scorecard provides the basis for strategic IT decision making that is aligned with business objectives. The business components represent loosely coupled, highly cohesive and encapsulated management capabilities within*

Transforming IT business components from "loosely coupled" to "highly coordinated" is the ultimate goal—and challenge—of service management.

IBM Service Management relies on strategic planning and combining service and asset management "accelerators" to enable rapid implementation of best practices, tools and roles.

IT. Service management requires understanding these components and then developing the governance required to move them from "loosely coupled" to "highly coordinated." This is the ultimate challenge within service management. Meeting this challenge requires rigorous and reliable reference models for both the processes and the business components themselves—as the basis for improvement planning.

- The <u>ITSM</u> <u>Flash</u> <u>Assessment</u>—to help prioritize service management improvements.
- The ITSM Adoption Model to help strategic planning for service management, leveraging a complete process maturity model for IT processes, COBIT controls and ITIL practices.
- Through development and targeted acquisitions, we have been busy changing what is possible from a service management architecture perspective. Service management is too critical to rely on old technologies with client server architectures, version-to-version upgrade hassles and other limitations inherent to the old architecture styles of the 1990s. IBM software provides a modern, SOA-style J2EE™ architecture as the basis for your service management system.
- A portfolio of service and asset management "accelerators" that enable rapid implementation of the most common service and IT asset management practices, tools and roles.

The original project to produce ITIL had simple goals—define the best practices for managing IT services that will result in the achievement of three clear objectives:

- Improve the quality of IT services
- Reduce the long-term cost of IT services
- Align IT services with business objectives.

The actual experience with implementing best practices has shown that the full achievement of these objectives is elusive. Achieving the benefits has been far more challenging than merely knowing the practices. Industry experience has established the old truth that "education is not implementation." One of

Actually achieving the desired business objectives is not as easy as learning the best practices designed to facilitate their achievement.

The promise of ITIL and IT service management has remained an elusive one.

the first implementation lessons learned was that knowing best practices does not lead to automatically experiencing the benefit of the best practices.

Industry analysts have observed that many management process-oriented projects fail to deliver real business value. "The Prime Solution," by Jeff Thull, describes pitfalls that are common to significant solution-based management system changes."[1] Our experience is that service management solutions share many of the characteristics of the solutions described in that book. These solutions offer great potential value to an IT business; the value is difficult to achieve, but the obstacles to success are predictable and therefore controllable.

How is it that the promise of ITIL and IT service management is so elusive?

The first challenge is determining where to begin. What should we do first? Then what? Why do some companies achieve a 10–40 percent reduction in their yearly infrastructure management costs and others receive no benefit at all? How is it possible that the network manager for one of the largest manufacturing companies in the U.S. could tell us, "We implemented ITIL three years ago and received no benefit"? How can that be, when virtually the whole world agrees that these are the best practices for managing IT services?

The answer is that there is a great difference between knowing a best practice and being able to effectively implement that best practice.

Unfortunately, there is no commonly accepted definition of what it means to implement ITIL.

Even the best-intentioned ITIL adoption effort can result in high cost with no measurable benefit when it's approached without a clear definition of the desired business objectives.

Workshops based on ISO IEC 20000 and COBIT guiding principles can facilitate an end result that is "auditable."

Worst practices

Clearly a worst practice has been an "ITIL-for-ITIL's-sake" approach to adoption and implementation. These efforts are usually characterized by the lack of adequate funding and limited management commitment—grass-roots enthusiasm morphing into islands of fragmented efforts with no top-down support. These good intentions typically lead to higher costs coupled with scrap, rework and delayed benefits. Inevitably, these ITIL-enthusiast-led projects degrade into a series of arguments over the content of one paragraph in one ITIL book compared with another paragraph in another ITIL book. Such arguments occur because the focus is on academic partisanship and parochial interests rather than a focused business perspective based on agreed-to guiding principles.

A better approach is to define the business objectives first so that when debates arise, they can be compared with the documented objectives. Decisions can then be made based on the business perspective rather than the personal preferences of the most persuasive believer.

Documenting guiding principles at the beginning of a project serves other purposes as well. In our post–Sarbanes-Oxley world, IT success in IT management is no longer based on how long it has been since your last major "event," but on your ability to provide "auditable," consistent and planned quality. We use both ISO IEC 20000 and COBIT-based guiding principles workshops to help to define project intent to enable an end result that is aligned with the requirements of the typical audit. It is the burden of IT to be sure that IT management best practices are implemented in a way that survives "the audit." The best approach is to design the management capabilities from the beginning to comply with the most common audit requirements.

A common but erroneous assumption is that the service desk plays a minor role in service management. In truth, the service desk should be managed as a vital business asset that improves productivity while enabling proper usage of IT resources and services throughout the enterprise.

Another "worst practice" has been to view service management as a number of very limited concepts. For example, some view the service desk as a small and insignificant aspect within service management. The service desk management discipline remains immature with insufficient concern for:

- *Integration with knowledge and configuration management—What solutions are available for each CI (configuration item) and what service levels apply to each request?*
- *Integration with incident, knowledge and problem management—What first-call resolution rate (FCRR) is enabled by knowledge management? Most companies think they know what their FCRR is, but that understanding is usually based on complex formulas that often do more to hide the truth than illuminate it. What percentage of the total calls "could" have been closed on the first call, given the solutions available in the knowledge system? Most organizations have no idea what FCRR is really enabled through effective incident, problem and knowledge management. They hold the service desk accountable for something beyond its immediate control, resulting in continued poor performance and limited improvements.*
- *Integration with change, portfolio and capacity management to ensure knowledge of what "will" impact them in the future*
- *Integration with service level management*
- *Self-service and automation that users actually use*
- *Scheduling, skills management and career paths*
- *Managing the technology portfolio that the service desk relies on*
- *Managing the service desk as a vital business asset that improves productivity and enables the proper usage of IT resources and services in the enterprise.*

Planning, designing, developing and implementing are often given insufficient attention in efforts to adopt ITIL, to a large extent because most managers simply have little or no experience in it. Planning and improving service management capabilities requires help from a variety of subject matter experts.

The role of education

Very often, "We implemented ITIL" really means that the company promoted widespread ITIL education and then attempted improvements to its service desk, incident and change management processes. Plans to address configuration management typically have not yet been formulated, while service level management suddenly becomes a hot-button issue. Despite the popularity of ITIL education, many IT organizations still attempt an unbalanced or unfocused approach to adopting service management. Why is that? Because the primary focus of ITIL is on IT service *management* best practices—the management or "run" phase—not on planning, designing, developing and implementing. ITIL Version 3 is designed to improve this area, but implementing ITIL itself—the service management best practices themselves—will remain a once-in-a-lifetime experience for most IT managers. Receiving help from those that have "been through it" is just good common sense. The fact is that implementing best practices does take more than a little experience. Service management is a complex system. The infamously cynical U.S. journalist, editor and social critic H. L. Mencken has been quoted as saying, "For every complex problem, there is a solution that is simple, neat, and wrong."[2] This applies to service management as well. Service management is not a simple undertaking that can be implemented during a weekend change window. Planning and improving service management capabilities is a mission-critical effort that requires help from a variety of subject matter experts.

Educating everyone within IT about ITIL best-practice descriptions does not actually implement a single best practice. It does result in an educated workforce, usually worth more in the marketplace, but education is not implementation. Education does, however, play a vital role. It provides a common language, enabling the various parts of IT and the business to communicate more effectively with each other. In fact, for many companies, adopting the common language and terminology provides one of the most important benefits of ITIL. But if that communication never takes place, and if measurable business objectives are not defined as justification for adopting best practices, any ITIL implementation will fall far short of its purpose. Knowing best practices is not the same as managing them, nor does it ensure that an ITIL implementation will pay off for your business. The best uses for education during implementation are:

- *Communicate the language and concepts of the strategic vision. This does not require certifying everyone on your staff. It does require communicating the language and concepts involved in your strategy. ITIL awareness and executive briefings can play an important role in this situation.*
- *Train IT staff on their new roles as part of the roll-out of the new solution. ITIL Foundations and Practitioner training can provide value in preparing your process owners, process managers and key process participants for managing the new solutions being rolled out.*
- *The IT Management Education Curriculum should include, but not be limited to, ITIL education. A full curriculum should consider the education requirements for all the roles within the governance model required to direct, control and execute service management.*

Directing roles	IBM Component Business Model and the business of IT executive workshop IBM service management strategy and planning workshop	Other IT service management and governance summits, events and conferences
Controlling roles	Communication skills Business or IT process modeling COBIT training or training on other audit frameworks ISO IEC 20000 training e-SCM or other service management assessment and certification training	Six Sigma or Lean Sigma for process owners Professional associations and memberships Training or learning specific to a particular process activity, such as root-cause analysis University programs related to services science
Execution roles	Customer service skills Listening skills Communication skills Process participant training	Tool user training Tool administrator training ITIL Training, Foundation, Practitioner, Service Manager Documentation skills: writing, grammar, clarity

The first step to take in implementing ITIL best practices is to determine what business objective or value proposition is driving the need for change.

Objectives are easiest to meet when they are clear, documented and measurable.

An education plan should consider your full need, and ensure the best use of your education investment.

Implementation

The best approach to implementing best practices always begins with understanding why you are doing it. What is the business driver or value proposition that is behind the need for change? IT typically requires a driver that originates outside of IT to successfully drive a project like this. Generally this will include statements like, "When we have finished, we will have reduced XYZ costs by X percent, or … improved XYZ quality by Y percent, or … achieved this specific business objective." Then the definition must continue in detail, discussing how service management best practices (and which ones) will be adopted and adapted to the unique IT organization and business requirements.

These objectives are best when they are clear, documented and measurable. Success will require two sets of metrics: those related to implementation and those related to the operational results of the solution itself. All the old maxims still apply:

- *What gets measured gets done.*
- *Inspect what you expect.*
- *What can't be measured won't be agreed upon.*
- *Metrics are the language of business.*
- *Good intentions are the language of the old IT.*

In the past, some IT organizations have lost credibility with business leaders as a result of a series of challenges, including:

- *Y2K—the design flaw itself was criticized, but so were many attempts at remediation, which uncovered preexisting inefficiencies in hardware, software and infrastructure management practices*
- *The dot-com boom—and subsequent bust*

Clear milestones, phased initiatives and measurable success factors help to ensure success in implementing best practices.

It should be remembered that although ITIL best practices are comprehensive, they are not all-inclusive, and they do not define in detail every possible step or technology required.

- *Lack of proven ROI following major investments*
- *Inability of IT management to provide real-time information about an organization's assets, including their location, status and total cost of ownership*
- *General dissatisfaction with outsourced services and outsourcing cost overruns*
- *A continual escalation in IT workload, resulting in cost increases for additional staff*
- *A continual escalation in IT complexity in order to meet increasing requirements for services and service quality.*
- *A continual increase in the IT operations budget, which reduces the amount of funding available for new development when total IT budgets remain flat.*

The new IT management focuses on the business perspective and manages effective processes and services in an auditable way. Success in implementing best practices recognizes this and relies on mature project management disciplines to define clear milestones with phased initiatives as well as clearly understood critical success factors. IBM provides both the business perspective and project management disciplines necessary to assist our clients who desire to implement best practices.

IBM Implementation Services

This leads to the next lesson to be learned about ITIL: *"Knowing where you want to go does not mean that you know how to get there."*

A basic and generally accepted concept has always been that ITIL describes the generally accepted best practices, but not all the practices. ITIL does not cast in stone every action required, every role or job that is required, or every

A standard vocabulary must be established at the outset of any ITIL best practices implementation project.

technology that is required. ITIL is about what a number of best practices are — but not all of them. That is something that will differ from organization to organization.

You've made the commitment, and you have a framework — now what? Where can you go for practical and specific implementation advice? What should you do first?

ITIL implementation can be summed up in the phrase, "adopt and adapt." The beginning phase in every case includes adopting a standard language and set of service management concepts. ITIL is a good place to start, but there are other specific concepts and terms in service management that can quickly create confusion if specific attention is not given to the language of service management — at the beginning. Some of these critical terms include:

- *IT process*
- *IT service*
- *Business process*
- *Business service*
- *IT governance*
- *Service management governance*
- *Service catalog*
- *Service request – user request*
- *Service request – customer request*
- *The definition, extent and scope of service management, etc.*

IBM continues to support a number of industry efforts to further clarify and agree on these and other terms.

The second phase is to adapt service management best practices to your unique requirements.

- *ITIL Version 2 includes a publication called "Planning to Implement IT Service Management."*
- *ITIL Version 3 starts with a volume entitled "Service Strategy."*
- *ISO IEC 20000 includes a requirement that service management "shall" be planned.*

Lesson learned: Strategic planning is the first best practice in most business activities, including service management. Service management needs to be planned. Plans should at least include:

- *The extent of the service management system and the scope of this particular effort*
- *The objectives and requirements*
- *The processes that are to be in scope*
- *The roles and responsibilities*
- *The process, organizational and technical interfaces*
- *The approach to managing risks*
- *The resources, facilities and budget necessary to achieve the defined objectives*
- *Tools as appropriate to support the processes*
- *How the quality of the service will be managed, audited and improved*
- *The governance model.*

Identifying a process weakness is only the first step in making improvements. Understanding the underlying business strategy, diagnosing current capabilities and establishing the areas of highest priority are critical next steps toward meaningful action.

Generic service management assessments indicate that you should start with improving any process that appears to be the least capable. But is that really the case? You may learn that you are a "1" or a "2" on some arbitrary scale but then what? Discovering general weakness in a certain process may be helpful in getting someone's attention, but it is not enough information to "act" on in any meaningful way. In order to "act" in the right way, you will need to:

- *Understand the business and IT **strategy**—where you are going*
- *Understand your **current capabilities***
- *Understand which capabilities are **important** now*
- *Understand which capabilities are labor-intensive, **expensive** to operate or **error prone***

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- *Prioritize* what areas need attention first
- *Diagnose* the areas of highest priority
- *Define a **roadmap** of everything you need to do to get from where you are to where you need to be, as defined by the strategy.*

IBM has been providing IT service management thought leadership based on our own experience in our commercial data centers for over 25 years. IBM has gone through its own transformation story—moving from separate lines of business and operating in silos to effective management processes governing the organization. But our ability to help others implement best practices is not based solely on our own internal experience. We believe that our experience is one approach and that there are other approaches that may work depending on your circumstances. We have worked with many companies in many markets, geographies and industries and under a variety of circumstances. We can bring to bear our own experience as well as our accumulated intellectual capital gathered by assisting others to help you plan to become a service- and process-oriented IT business.

In addition to undergoing its own internal service management transformation, IBM has helped companies of all types become service- and process-oriented IT businesses.

Practical implementation considerations

Another common issue with ITIL projects is the tendency to succumb to the all-or-nothing line of thinking; some enthusiasts would have you believe that you have to do it all—now—to get the benefits. Others promote the adoption of a few of their favorite processes due to their limited experience or available tools. Instead, we work with you to create an implementation approach that allows you to progressively enhance your service management capabilities through the initial integration of the required people, processes and technology and the enablement of iterative improvement of a measurable and repeatable management process. We will work with you and encourage you to limit the scope of your implementation project by staying focused on your

Contrary to a common misconception, ITIL implementation can be done using a phased approach in which you progressively enhance your service management capabilities.

business objectives. The tighter the scope, the lower the risk—and the greater the probability of success in completing your project and getting the agreed-to results. We will walk you through the logical steps needed to evaluate various scope-defining approaches.

However, all service management improvement should consider:

People
- *Roles, teams and functions*
- *Skill requirements*
- *Job descriptions*
- *Performance indicators*
- *Staffing levels*
- *Resource acquisition*
- *Training curriculum*
- *Staff training*

All service management improvements must consider factors relating to people, process, technology, information, service and governance.

Process
- *Policies and governance*
- *Process design*
- *Detailed workflows*
- *Technology and information requirements*
- *Workflow implementation*
- *Procedures*

Technology
- *ITSM architecture*
- *Tool requirements*
- *Tool evaluation and selection*
- *Tool installation*

The common goal of all service management objectives is to enable people to consistently deliver high-quality services to the businesses they support.

- *Development environments*
- *Customization and integration*
- *Testing*
- *Deployment*

Information
- *Information work products*
- *Data model*
- *Information flows*
- *Interfaces and integration*
- *Measurements*
- *Reports*

Service
- *Service definitions*
- *Service designs*
- *Service workflows*
- *Service portfolio*
- *Service catalog—user (operational) and customer*
- *Service level agreements*
- *Cost and charge models*

Governance
- *The decision rights and accountability framework for directing, controlling and executing IT service management*
- *The governance lifecycle process—planning, designing, implementing, monitoring, assessing and improving governance*

All service management objectives have a common goal: well-trained people, armed with the right information, consistently executing well-defined, technology-enabled processes to deliver high-quality services to the businesses they support.

A configuration management database (CMDB) must be a comprehensive repository that not only identifies all IT infrastructure components, but also explains how they relate to one another and to events that affect them.

An effective configuration management database (CMDB) is essential to effective and efficient service management processes. But how do you determine the requirements and justification for configuration management when all the benefits come from improvements to the other processes? The order and approach to implementation must consider existing capabilities as well as the business and IT strategy.

While ITIL documentation describes the CMDB only at a high level, it is clear that it needs to be a comprehensive (and technically sophisticated) repository that identifies all components in the IT infrastructure, and how they relate to one another as well as to the events that affect them.

IBM Software provides management products and services that support service management by driving down to practical and procedural levels of functionality. In conjunction with IBM Business Partners and our alliance network, we offer a wide range of solutions designed to address the full spectrum of service management capabilities. Our own capabilities include:

Services
- *IT Management Education and Briefing Services*
- *IT and Business Process Assessment Services*
- *Diagnostic Services*
- *IT and Business Strategy and Planning Services*
- *IT and Business Process Design Services*
- *Implementation Services*
- *Managed or Outsourced Services*

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*Several IBM services leverage
IBM's service management
experience and methods, along
with the expertise of its ITIL-
certified consultants, architects,
specialists and project managers.*

Products

- *IBM Tivoli Systems Management*
- *IBM Tivoli Service Management*
- *IBM Tivoli IT Asset Management*
- *IBM Tivoli Enterprise Asset Management*
- *IBM Rational Application Management*
- *IBM Lotus® Workplace*
- *IBM WebSphere® Business Process Products*

Some of the core concepts that we believe the service management architecture should comply with include:

- *SOA-style J2EE Integrated Architecture*
- *Integrated and advanced automation capabilities*
- *Product flexibility, ease of customization*
- *Simplified version-to-version upgrades (metadata repository of customizations)*
- *Support for application convergence – fewer applications, increased integration, more robust functionality*
- *Workflow management within the processes*
- *End-to-end lifecycle management of all asset classes*
- *Multisite, multilanguage, multi-tenancy*
- *Openness regarding interfaces to other systems.*

<u>Core</u> <u>IBM</u> <u>services</u> that leverage IBM's experience with service management, along with our methods, assets and breadth of skills – including our certified consultants, architects, specialists and project managers:

A robust set of advanced management techniques helps ensure that IT processes and services support continuous business transformation.

It's essential to understand the relationships between the various concepts, processes, roles, tools, etc. that make up service management.

- *Business of IT executive workshop*
- *Service management strategy and planning*
- *Service management design*
- *Service management implementation*
- *Portfolio of service and asset management accelerators*
- *Training and certification services*

The service catalog and the service portfolio

Expected business results are not a fixed target. As the enterprise responds and transforms to meet new business requirements, IT also needs a robust set of advanced management techniques to ensure that its processes and services support continuous business transformation in a timely, efficient and customer-oriented way. A suggested focal point is the service catalog. The service portfolio and service catalog are foundational information work products used by a variety of roles within service management. They allow customers and IT to collaborate in the evaluation of value-added services.

The service portfolio, the service catalog and service level management represent the most visible points within service management. The service desk represents the operational management of the users' day-to-day contacts. Configuration management represents the base level of information required for effective service management. In between the catalog and the configuration management database, many processes, roles, teams, functions, tools, information work products, service designs and governance make up the complete complex system called "service management."

Understanding your infrastructure components (ITIL "configuration items" or "CIs" and "managed objects") and application dependencies is just as critical as understanding your service portfolio. All the other process-based capabilities that sit in between those extremes are also critical management aspects

Seeing all your IT services as a service portfolio helps you demonstrate and optimize solid IT value—both internally and to your clients.

IBM consultants have the experience and intellectual capital needed to develop the right approach to designing, implementing and deploying service management based on your unique business requirements.

within service management. Reducing service costs, improving service quality—planning and implementing service management requires understanding the relationships among all these concepts while staying focused on the real business objectives so you can identify the short list of key areas that will provide the maximum value with the least disruption and cost.

As service management environments mature, enterprises focus attention on optimization of the catalog and its contribution to the business. That leads to another ITIL lesson learned: *The ability to see all your IT services as a service portfolio is essential.*

A service portfolio is a managed collection of (business and) IT services and service commitments. Your portfolio is a coordinated set of investments and capabilities, optimizing the value that your customers receive from their partnerships with you; allowing them to shop for and select services in the service catalog as they are needed.

Evaluating and optimizing your entire IT service portfolio is the key to demonstrating solid IT value. Processes enable efficiency, effectiveness and adaptability in IT, but IT services represent the value IT provides to business processes and business services.

IBM consultants are ready to assist your business in designing, implementing and deploying service management from the ground up, the top down or through a variety of other approaches—whatever scope and approach make the most sense given the unique set of requirements you have at this time. The depth of our experience and intellectual capital allows us to be flexible in our approach to collaborative planning, design and implementation services.

Using IBM service delivery centers also minimizes the business resiliency risk normally associated with significant organizational or operational change. IBM Strategic Outsourcing provides best-practices IT environments with performance you can count on. Our business of IT executive workshop can help you validate which business components within IT make sense to

IBM business of IT executive workshops can help you determine which aspects of your IT operations make the most sense to outsource.

outsource – and which don't. For example, IT business components that are expensive to operate and nondifferentiating to the business should be considered for outsourcing. IT business components that are differentiating but have low current levels of capability require immediate attention and should be included in an internal service improvement program. Clients can rely on IBM Strategic Outsourcing as a safe harbor for experiencing the benefits of a controlled, mature and certified service management system that conforms to the requirements of ISO 9001. IBM is ISO 9001 certified at the corporate level. Our outsourcing service delivery centers are also certified individually and in concert with other business unit certifications. IBM outsourcing services enable you to have confidence that your operations are up to date with the practical lessons learned in many business environments through many years of successful commercial service.

IBM can help you achieve continued service management success, regardless of whether you choose to out-task or outsource, or to develop, maintain and enhance your information technology capabilities in-house; or any point along the continuum between those two extremes. Structuring your internal operations and your outsourced services along the same set of industry-accepted practices positions you to optimize your scalability, flexibility and customer satisfaction while controlling costs.

IBM can help you transition from an outsourced service arrangement to an insourced one through the implementation of effective service support, service delivery and infrastructure management best practices.

Conclusion: IBM offers a full range of implementation options

For ITIL implementation to be truly successful, it must create not only IT benefits, but also demonstrated and acknowledged business benefits.

Successful ITIL implementations must create acknowledged business value in addition to the IT benefits associated with best practices for service management. IBM can help make it happen for you.

IBM doesn't just teach or talk about ITIL from an academic perspective. Over the years, we have helped clients understand the dynamics of ITIL. We have helped them implement robust, reliable and scalable infrastructures and the management practices required to support the delivery of IT services to address well-defined business needs.

Our experience with our own internal global operations and service delivery centers, our experience with hundreds of clients, our breadth of capabilities and our global methods and intellectual capital are available to help you establish a complete management framework that links IT services directly to business results, while overcoming the common obstacles to implementation and execution in ITIL environments. We provide practical, actionable advice on strategy, proven integration methods and implementation roadmaps tailored to your needs. For example, when time to implementation is a critical factor, we can provide a full set of services, a full portfolio of accelerator solutions and a full portfolio of outsourced service options. Regardless of where your service management environment resides, IBM can show you how to move to advanced levels of service management capability maturity.

No other potential partner has IBM's breadth and depth of service management experience. Deliver tangible business value through a service management partnership with IBM today.

For more information

To schedule a visit, contact your IBM representative today.

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