IBM

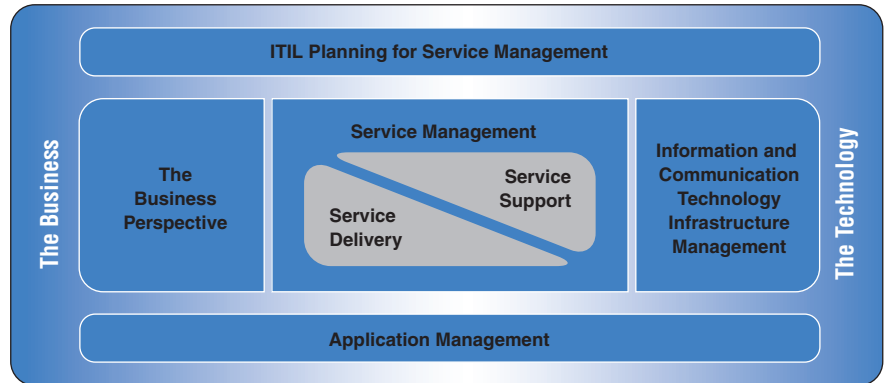# IBM and the IT Infrastructure Library.

How IBM supports ITIL and provides ITIL-based capabilities and solutions

Contents

*IBM Global Services applies a
unique set of skills, assets and
methods to help build clients'
Service Management programs.*

Executive summary

Does IBM support ITIL?

IBM contributed significantly to the original IT Infrastructure Library (ITIL), and continues to be a developer, reviewer and user of the ITIL framework. For example, IBM led the project to write the new Application Management book. This book, coauthored by IBM and Microsoft, has recently been published by the Office of Government Commerce (OGC) in the U.K.

Does IBM have ITIL capabilities?

IBM Global Services applies a unique combination of skills, assets and methods to help ensure we successfully apply our capabilities in implementing ITIL best practices in our clients' Service Management programs. IBM has captured the best practices and intellectual capital drawn from client engagements worldwide and our own experience in running global information technology (IT) operations. We use our award-winning AssetWeb Intellectual Capital Management system to help ensure that IBM practitioners around the globe share and have access to our extensive ITIL knowledge and intellectual capital. IBM methods feature industry best practices on which to build projects. Our ITIL expertise helps ensure a fast project start and a stable ground for the ongoing project.

How can IBM help me implement ITIL?
IBM Infrastructure and Systems Management Services encompasses the entire systems management lifecycle—from education to assessment, strategy and design, to implementation and operations. IBM has a proven track record in successful implementation of ITIL-based solutions. IBM can:

- *Educate your staff and manage their certification in ITIL skills*
- *Help you understand the IT service needs of your customers, and develop and manage an appropriate service portfolio using the ITIL framework*
- *Determine the key capabilities you require to deliver those services and develop appropriate strategies for developing or sourcing those capabilities*
- *Design and implement the ITIL processes specific to your business require-ments, being certain to include all elements that must be incorporated to support a successful solution (measurements, organizational change, roles, reporting requirements and other governing aspects).*

IBM offers a set of predefined solutions that can be implemented quickly and that deliver value within a few weeks.

How is IBM unique in the IT Service Management marketplace?
IBM offers a set of predefined solutions derived from the best practices described in the IT Infrastructure Library and implemented on the leading ITIL-compatible tools. These predefined solutions, called IRM (Infrastructure Resource Management) accelerator solutions, are based upon proven product implementation templates. The solutions include tailored industry leading infrastructure management tools (further personalized to the client's organiza-tion), job and role definitions, user procedures, installation aids, measurements and reports. They have proven to significantly reduce implementation time and to offer value in a few weeks.

IBM has played an important role in helping ITIL reach its current level of maturity.

IBM promotes and supports ITIL

IBM recognizes that the IT Infrastructure Library is an important reference framework for providing a structured approach to IT Service Management. ITIL is a nonproprietary set of definitions, with education and certification available from a variety of sources. IBM encourages IT providers to embrace ITIL as the foundation for elements of their IT management system, particularly IT Service Management.

IBM has been an active participant in the development and enhancement of the ITIL documents, and has played an important role in helping ITIL reach its current level of maturity. IBM is also active in organizations such as the IT Service Management Forum (itSMF) that seek to promote ITIL and effective Service Management. In most countries where itSMF has a national chapter, IBM is an active member.

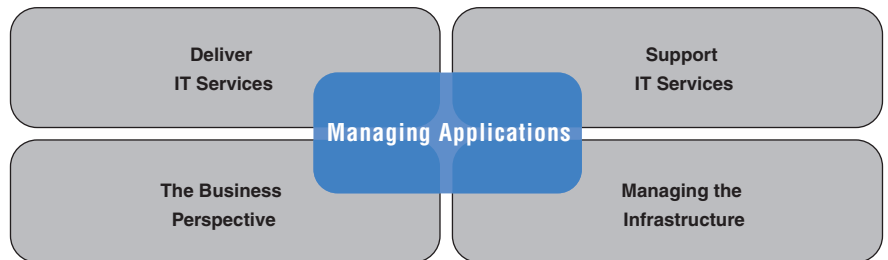**IBM has a long history related to ITIL development**

IBM has been and continues to be a developer, reviewer and user of the IT Infrastructure Library. In the early 1980s, IBM documented the original Systems Management concepts in a four-volume series called *A Management System for Information Systems*. These widely accepted "yellow books," along with education and expertise provided by IBM, were key inputs to the original set of ITIL books. Since then, IBM Service Management implementation experience that was gained during the 1980s and early 1990s has contributed to the ongoing development of the ITIL books.

IBM consulting and services personnel have helped to write key ITIL publications as well as develop courses on topics currently at the forefront of IT Service Management.

IBM has been an active participant in formally contributing to the content of the new versions of the ITIL Service Delivery and Service Support books. As part of this effort, IBM recently reviewed the draft version prior to final release of the new *ITIL Handbook*.

Most recently, IBM led the project to write the new *Application Management* book. This book, coauthored by IBM and Microsoft, has been published by the Office of Government Commerce (OGC) in the U.K. (ISBN 0-11-330866-3).

Deliver IT Services	Support IT Services
Managing Applications	
The Business Perspective	Managing the Infrastructure

In 2000, IBM consulting and services personnel developed a comprehensive correspondence course on IT Service Management, embodying the supporting ITIL concepts. The course, titled "IT Service Management—Developing and Maintaining a Professional IT Service Management Organization," presents topics that are currently at the forefront of IT Service Management. The course is now available through the International Management Forum (IMF).
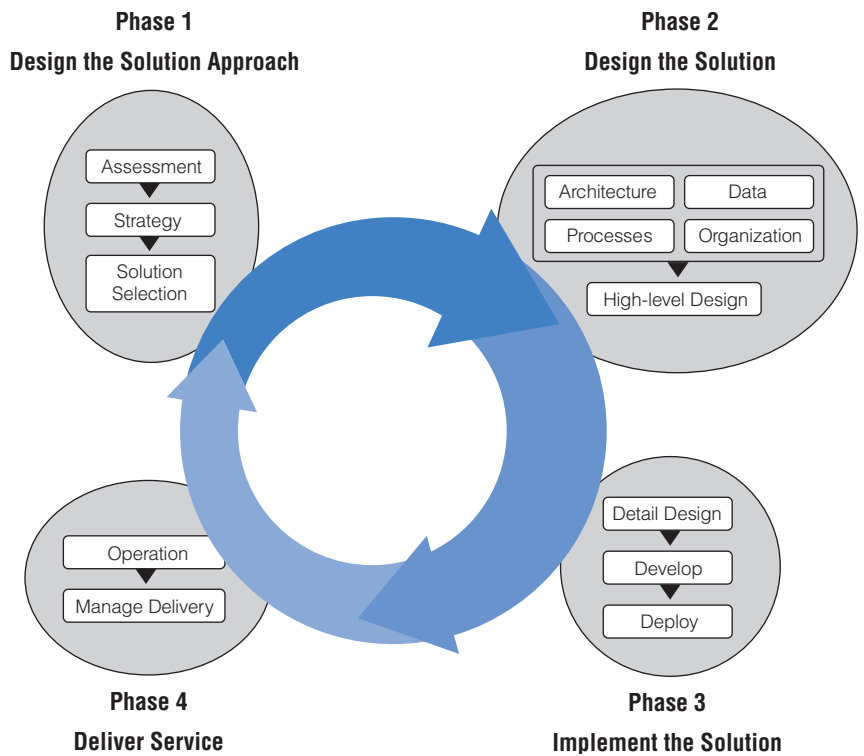
As a worldwide provider of ITIL examinations, EXIN (Examination Institute for Information Science) contributes to the overall development of ITIL skills and expertise. IBM currently has seven EXIN-certified ITIL Service Management instructors, who are also accredited to review exams. Last but not least, IBM has been accredited by EXIN International for world wide delivery of ITIL Foundations and ITIL Service Manager certification courses. Each IBM geography has access to the resources necessary to provide Foundations and Service Manager certification courses.

IBM consulting and services use proven approaches to the many phases of Service Management improvement programs

The roadmap for IBM's Service Management Consulting and Design Services is the IBM Systems Management Solution Lifecycle. This lifecycle is consistent with the ITIL framework and leads you through the four phases of implementing IT Service Management, as illustrated in the figure below.

The IBM Systems Management Solution Lifecycle provides a best-practices-based road-map for implementing a comprehensive, integrated IT Service Management solution.

Phase 1
Design the Solution Approach

Assessment

Strategy

Solution Selection

Phase 2
Design the Solution

Architecture | Data

Processes | Organization

High-level Design

Phase 4
Deliver Service

Operation

Manage Delivery

Phase 3
Implement the Solution

Detail Design

Develop

Deploy

Highlights

The IBM Systems Management Solution Lifecycle offers a best-practices approach, delivering seamless, end-to-end systems management solutions. The lifecycle encompasses methods, knowledge, data and analytics.

This lifecycle closely mirrors the ITIL-recommended Process Delivery Methodology of Process Design, Process Improvement Definition, Analysis & Design, and Pilot Deployment. IBM's approach further extends this model to help ensure that we provide a fully integrated and comprehensive solution—one that addresses the various aspects of process, organization and tools.

IBM's Infrastructure and Systems Management Services encompass the entire systems management lifecycle—from assessment, strategy and design, to implementation and operations. Our professionals have the expertise, proven methodologies and tools to help you plan, deploy, optimize and manage the complex, multivendor IT systems infrastructure that supports your business.

Skills, assets and methods to implement ITIL solutions

IBM Global Services applies a unique combination of skills, assets and methods to help ensure we successfully apply our capabilities in implementing ITIL best practices in our clients' Service Management programs.

Skills: IBM professionals have extensive experience in the many aspects of systems and Service Management. The global breadth and depth of those skills mean we are ideally positioned to help our clients in these fields. IBM actively uses the ITIL education curriculum to train and certify appropriate services personnel in Service Management skills and how to apply them in client environments.

Assets: IBM has captured the best practices and intellectual capital drawn from client engagements worldwide and our own experience in running global IT operations into our AssetWeb Intellectual Capital Management system. With this system, all of our practitioners can leverage our store of ITIL knowledge to accelerate the planning, designing and implementing of your ITIL solutions.

Methods: IBM Systems Management Consulting and Design Services methodologies are based on years of practical experience solving client problems. They provide industry best practices on which to build your projects. This helps enable a fast project start and a stable platform for the ongoing project. The IBM methodologies are modular, configurable to the individual needs of each project, and closely align to the ITIL process principles.

Based on years of practical experience solving client problems, IBM methodologies can be configured to meet the individual needs of your project.

IBM's Solution Lifecycle provides you with a clear approach to effectively using skills, assets and methodologies to support your ITIL Service Management implementations. Please see *ibm.com/services/ism/consulting/* for more information on the Solution Lifecycle approach.
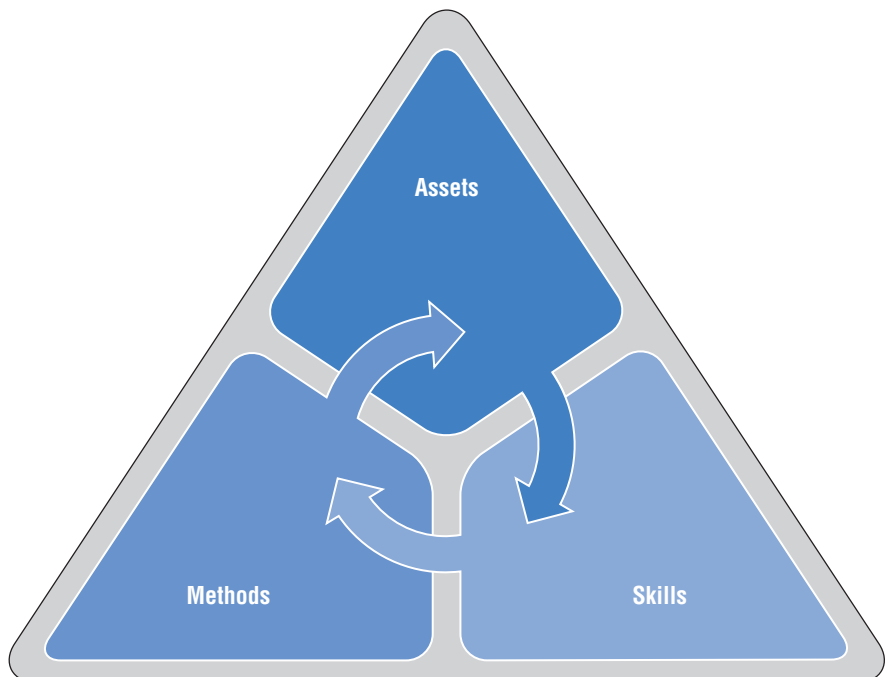
Highlights

Understanding your customers' wants and needs provides insight into how your value propositions— and the IT infrastructure required to support them—should be designed.

Solution approach—IBM can provide skilled ITIL practitioners to assess your IT capabilities and to create the appropriate Service Management strategy

As the global marketplace continues to expand and the reliance on Web, wired and wireless devices increases, the information technology infrastructure of e-business has become a mission-critical component of the global enterprise. IBM provides ITIL-aligned services to help you:

- *Understand the IT service needs of your customers*
- *Develop and manage your service portfolio*
- *Determine the key capabilities you require to deliver those services*
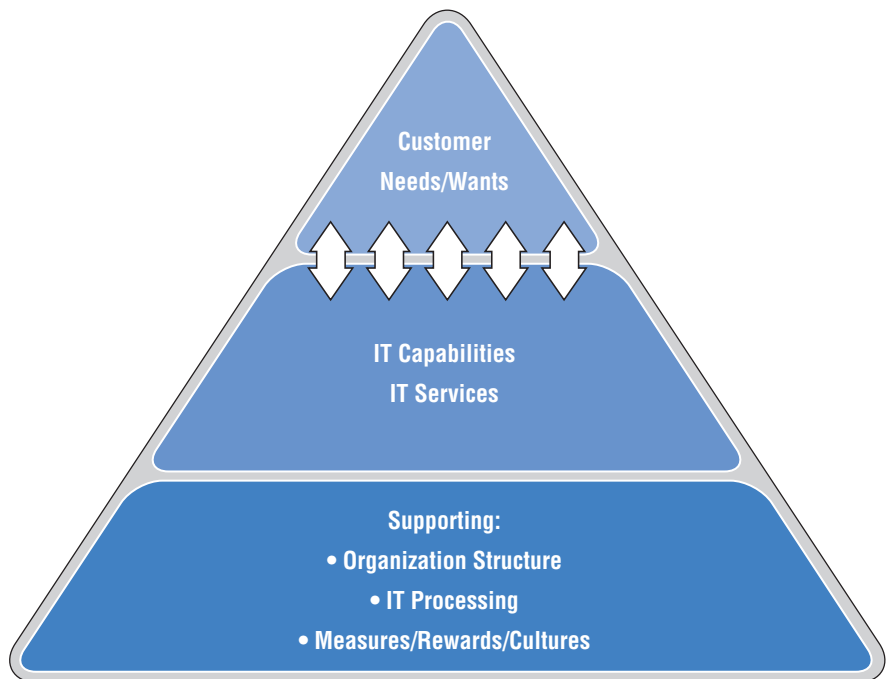- *Develop appropriate strategies for developing or sourcing those capabilities.*

Understanding your customer's business requirements provides a clear view of what they need from the supporting IT infrastructure. This understanding can help identify gaps, weaknesses or misconceptions that need to be addressed through redesign of products or services. These customer wants and needs subsequently become the design points for value propositions that can be offered, as well as for the capabilities and enablers needed to deliver and support the value propositions.

IBM Global Services methods help you to identify your customer's requirements, so you can focus on the levels of IT service that will meet their expectations.
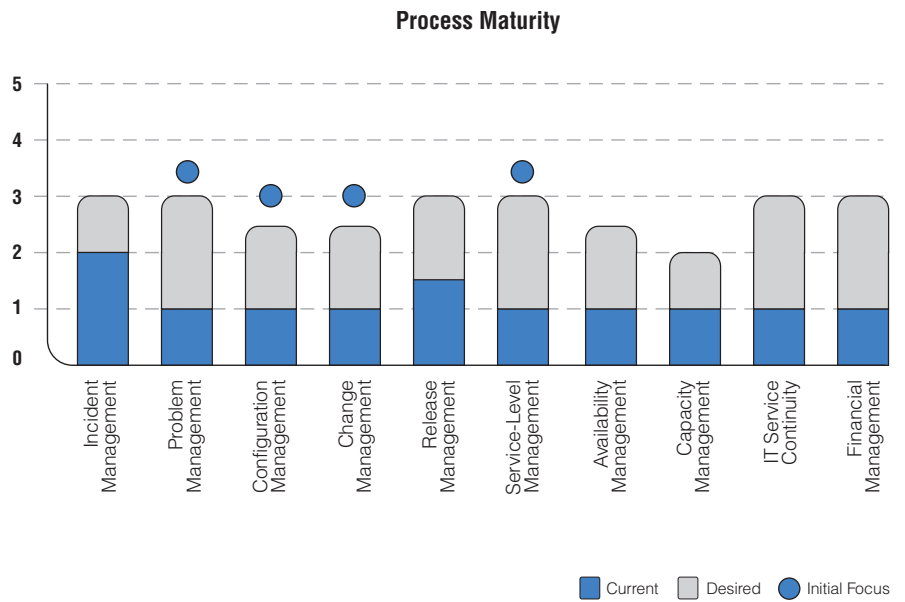
Highlights

IBM can help you create an IT services portfolio to guide your IT investments.

Based on a solid understanding and appreciation of your customer's requirements and the services they value, we can help you define an ITIL-based portfolio of IT services that will address their needs. Based on this service portfolio, we can help you prioritize services and develop plans to improve current services or provide new ones. An IT services portfolio, prioritized against dimensions such as strategic value to the company, can provide guidance on where IT investments should be directed. The IT organization can then focus on developing the competencies and capabilities it needs to deliver those services. Thus, resources can be redeployed in a manner that optimizes the value to the business. The figure below illustrates how the customer's requirements are channeled through a portfolio of IT services and capabilities, which are all based on the supporting IT infrastructure.

Highlights

Process Maturity

Legend: Current (blue) · Desired (grey) · Initial Focus (blue circle)

Categories: Incident Management, Problem Management, Configuration Management, Change Management, Release Management, Service-Level Management, Availability Management, Capacity Management, IT Service Continuity, Financial Management

IT organizations today are being asked to do more, but with the same or fewer resources. Given the finite resources and funding available, IT organizations need to concentrate on where they can add the most value to the business. This may mean rationalizing services offered to IT customers, withdrawing some services or considering alternative sourcing arrangements. IT needs to consider both the direct costs and the opportunity costs of not providing each service.

Identifying the services where internal IT organizations add the most value to the business is key to determining service delivery capabilities. Core competencies can then be defined on the basis of value-add to the business rather than what the IT organization does best today.

Please see *ibm.com/services/ism/* for more information on IBM consulting services.

Identifying where your IT organization adds the most value is key to determining its core competencies and hence optimizing your IT resources.

Design—IBM can provide ITIL-skilled practitioners to integrate the critical management elements into a comprehensive solution

Today's e-business requires mission-critical systems to be available around the clock. IBM's Systems Management Consulting and Design Services are designed to integrate the critical elements of Service Management—processes, tools, data and human resources—to deliver improved performance and reliability of IT systems through the application of the ITIL constructs.

IBM's Service Management solutions tailor the ITIL framework and best practices information to suit the needs of each individual client, and incorporate the following elements to help ensure success:

- *Specific measurements for the processes and services, to promote achievement of return on investments*
- *Techniques to plan and manage process deployment, to take advantage of quick wins and to plan for integrating services delivery organizations*
- *Facilitation of organizational change, to ensure understanding and acceptance of the solutions by staff*
- *Analysis and planning of essential skills required for performing the improved Service Management processes*
- *Definition of the required reporting requirements for the solution, to be able to communicate successes and analyze opportunities for improvements*
- *Assignment of governance roles and elements to promote clarity of responsibilities and understanding of the contribution of Service Management solutions to the business*
- *Definition of interfaces and handoffs to other processes to reduce duplication of efforts*
- *Development of a service culture in which employees exhibit appropriate behaviors and attitudes in their dealings with customers*
- *Integration with service delivery partners in creating product and services solutions to the benefits of your business.*

Please see *ibm.com/services/fullservice.html* for more information on the broad range of IBM Integrated Technology Services.

IBM accelerator solutions support rapid deployment of standard ITIL processes and products.

Implementation—IBM provides implementation assistance and predefined ITIL-aligned solutions for Service Management

During implementation we verify that the ITIL concepts and best practices are put to work for the benefit of our clients. The overall objective is to promote the achievement of returns expected from investment in service improvement programs.

IBM has developed a unique program for rapidly implementing the ITIL processes through the deployment of ITIL-compliant products. Our years of experience dealing with clients to address IT management has shown that successful solutions are built upon a common foundation—an integrated Infrastructure Resource Management (IRM) solution.

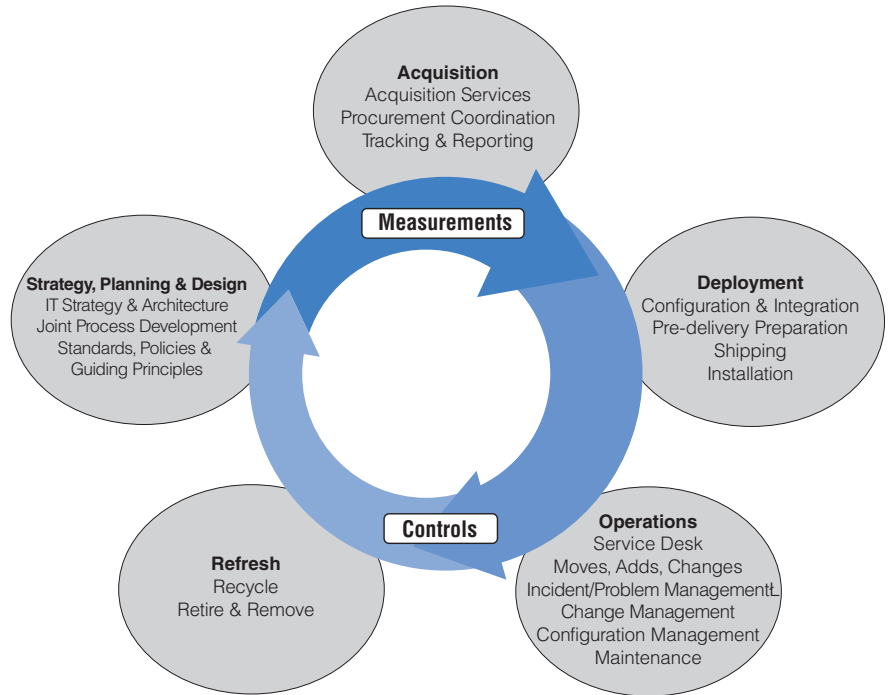Source: Quint Wellington Redwood and PTT Telecom
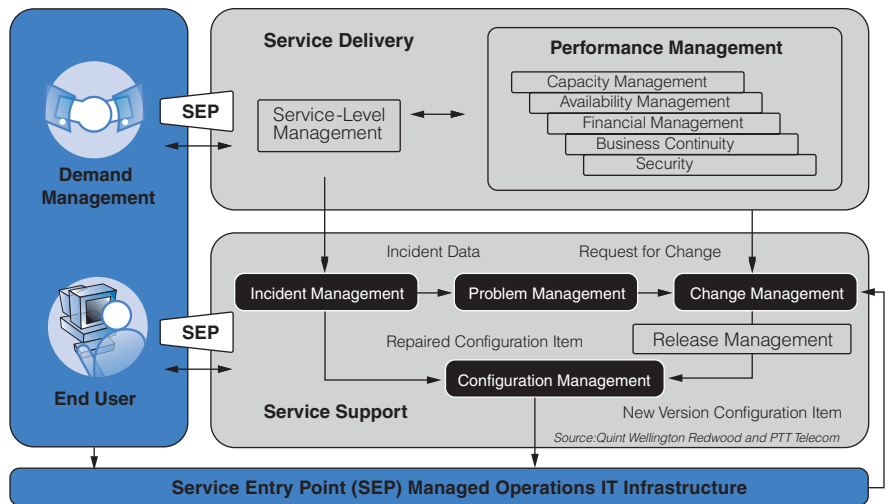
As part of the IBM Infrastructure Resource Management Services offering, the IRM accelerator is a suite of predefined solutions derived from the best practices described in the IT Infrastructure Library, and implemented on leading ITIL-compatible tools. IBM has successfully mapped the ITIL processes into leading infrastructure management products to create packaged solutions; these solutions have been proven in the field through successful deployment to IBM clients. The figure on the following page illustrates the types of available IBM IRM accelerator offerings.

The current IRM accelerator suite consists of Incident, Problem, Configuration, Change, Release, Service Level, and Asset Management solutions aligned with ITIL and other industry best practices.

Each accelerator discipline offers a predefined solution based upon proven templates. The solutions include tailored industry leading infrastructure management tools (further personalized to the client's organization), job and role definitions, user procedures, measurements and reports. In summary:

- *The accelerator solutions are predefined based upon ITIL and IBM IT Management Reference Model designs.*
- *The solutions provide effective Service Management through the use of best practices.*
- *Each implementation is personalized to the client's organization and environment.*
- *The solutions are comprehensive, consisting of tailored code, procedures, job descriptions and responsibilities, measurements and reports.*
- *Education is provided for key client personnel involved in the operation of the solution. (teach the teacher)*
- *The IRM accelerators exploit the power and flexibility of industry leading Service Management and asset management technology products.*
- *The client begins to receive value from the solution within a few weeks.*

Highlights

Acquisition
Acquisition Services
Procurement Coordination
Tracking & Reporting

Measurements

Deployment
Configuration & Integration
Pre-delivery Preparation
Shipping
Installation

Strategy, Planning & Design
IT Strategy & Architecture
Joint Process Development
Standards, Policies &
Guiding Principles

Controls

Refresh
Recycle
Retire & Remove

Operations
Service Desk
Moves, Adds, Changes
Incident/Problem Management
Change Management
Configuration Management
Maintenance

The IBM IRM accelerator Asset Management solutions, extend configuration management to include the management of the entire lifecycle of an IT asset and the Total Cost of Ownership. The purpose of this solution is to effectively manage infrastructure operations to drive down total cost of ownership, maintain and improve service levels, and enable new business capabilities.

Please see *ibm.com/services/ism/irm/* for more details on IBM Infrastructure Resource Management solutions.

Highlights

Strategic alliances with market-leading companies help enable IBM to provide scalable, end-to-end solutions for infrastructure resource management.

IBM Global Services professionals provide consulting and implementation services for industry leading software and solutions.

The IRM solutions are based on tools from the market leaders in ITIL-compatible IT Service Management tools.

IBM has formed technology alliance and partnership with industry leading Service Management and asset management software vendors to provide solutions that encompass the entire lifecycle of an organization's assets. As a premier infrastructure resource management solution provider for On Demand e-business environment, IBM Global Services markets, sells and provides services for industry-leading infrastructure management products to organizations globally. IBM provides infrastructure consulting and managed services using those products in both infrastructure management applications and e-marketplace enablement to hundreds of customers around the world.

IBM Global Services provides consulting and implementation services for IT management and support solutions using industry leading infrastructure management applications. Our solution portfolio includes services such as helping install, automate or consolidate help desks; and integrating Asset and Configuration Management with Change Management and Incident/Problem Management.

Education—IBM can teach you how to apply the ITIL concepts to help improve service delivery and support

Throughout the solution lifecycle, IBM can help you to build the ITIL skills and expertise necessary to successfully design, deliver and manage IT services.

IBM has successfully applied ITIL capabilities for the benefit of our clients

Recent global ITIL-related engagements include:

IBM is helping organizations worldwide and in a variety of industries design and implement successful IT Service Management solutions.

- *End-to-end implementation of many ITIL-aligned IRM accelerator solutions – worldwide and in different industries – since January 2002.*
- *Design of a Configuration Management Database (CMDB) (Configuration items, attributes, relationships) along with the process, roles and technology recommendations for managing and auditing configuration management and the CMDB at a large Ontario government agency*
- *Transition of ITIL-based processes at an international chemical company from "design" to "implementation" through the use of our methods and consulting expertise to realize their Service Management project goals*
- *Assessment of ITIL-based core systems management processes at a major oil company; creation of recommendations and transition plan for improvements*
- *Definition of a comprehensive and tailored framework of IT term definitions, processes, data interfaces and activities, including templates for documents, screen formats, report formats, etc., at a large North American utility company.*

Highlights

IBM is dedicated to meeting our clients' consulting and services needs with a full range of ITIL-based skills, products and solutions.

IBM Infrastructure and Systems Management Services can deliver high-quality ITIL solutions quickly and cost-effectively.

IBM's strategic ITIL steps

IBM Global Services continues to actively promote awareness and use of ITIL among our customer set. IBM's success is demonstrated by growing demand for our ITIL-based capabilities—skills, products and solutions. We will continue to support our clients by promoting the use of the ITIL framework across all IT activities.

IBM continues to build ITIL expertise in our workforce to ensure that qualified and certified ITIL consultants are available to our clients. IBM has over 1,100 specialists in 37 countries certified in the ITIL essentials, including over 160 certified Service Managers and is continuing this training and certification investment.

IBM has integrated the ITIL concepts and process information in the methodologies used by IBM Global Services practitioners worldwide, and will continue development of these methods.

IBM will continue to use our award-winning AssetWeb Intellectual Capital Management system to help ensure practitioners worldwide are armed with the latest best practices—techniques, experiences and information to foster successful IT Service Management investments.

ITIL education will continue to be provided for both customers and IBM practitioners. We will continue to enhance and extend the curriculum.

IBM will continue to be actively involved in developing and enhancing the IT Infrastructure Library.

IBM will continue to focus on business solutions, which will be delivered through offerings containing packaged services and products from IBM and partners that exploit the ITIL concepts.

IBM will continue to provide thought leadership in the area of IT Service Management. IBM has been fostering and leading efforts to have clients focus on services—to link to the business and provide enhanced IT Service Management. Our objective is to continue to lead our clients into the future of IT Service Management.

Highlights

Summary—The IBM value proposition in relation to ITIL

IBM is able to deliver ITIL solutions fast, with high quality, in a cost-effective manner because of:

- *A proven track record in IT Service Management*
- *Experienced, well-trained and certified personnel with many years of experience in ITIL*
- *Creation of ITIL skills through IBM IT Education Services*
- *Full range of solutions, from assessment and design to implementation and tool support*
- *Industry-leading application of methods, assets and skills to implement best-practices-based solutions*
- *Provision of and partnership with vendors of the leading ITIL-compliant tool sets to provide automated solutions (for example, the IRM accelerator suite).*

For more information

For more information please visit:

ibm.com/services
search for "ITIL"

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