



Tivoli software

**Enable IT to deliver services to the business more efficiently.
Help meet business service demands while minimizing costs.**



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Summary

The challenges for leaders of IT organizations are familiar: control costs and manage demands that can shift suddenly – without sacrificing service quality or diminishing customer satisfaction. Balancing these goals would be hard enough in a single organization managing a single infrastructure, but organizational silos that isolate practices and technologies in one part of the enterprise from those in another make it practically impossible.

IBM IT Service Management can help you solve these complex issues. It offers a modular approach that businesses of any size can use to efficiently and effectively deliver IT services. IBM has developed a range of tools and services that IT organizations need to integrate their people, processes, information and technology, thus supporting the evolution from a traditional siloed IT organization to an organization better aligned to support the business.

This white paper helps you understand the innovative IBM IT Service Management strategy and the leading-edge, comprehensive suite of IBM products that help organizations achieve efficiencies and drive flexibility.

Furthermore, the paper provides concrete examples of how IBM IT Service Management helps businesses optimize processes that extend across traditional IT silos – and by doing so cost-effectively and efficiently deliver better service to the business.

Highlights

Address the key pressures that IT faces

IBM IT Service Management represents a new way of thinking about IT that responds directly to the challenges that IT organizations face today:

Increasingly volatile change

As organizations seek to align the enterprise's technology in support of its strategic vision, IT becomes increasingly subject to the continually changing customer and competitive demands the organization faces. Success doesn't just depend on picking a certain type of operational management technology; it also depends on effectively managing demands for IT services.

Growing cost pressures

Reducing IT operations and maintenance costs is important for CIOs to demonstrate that they are effective managers of IT.* CIOs know that if they can spend less of their IT budgets on ongoing IT operations and maintenance, they can cut overall IT costs or even shift spending to research and development that generates better business results.

Burden of compliance

The growing ranks of regulatory requirements and the corporate policies designed to meet them give businesses no choice: noncompliance is not an option. However, most IT organizations lack a way to consistently measure policy compliance across the enterprise – let alone enforce compliance with internal policies – without draining far more staff time than will ever be available.

Most IT organizations lack a way to consistently measure policy compliance across the enterprise

Adopt an improved approach to IT service delivery

To effectively manage quickly changing demands and cost pressures and address compliance requirements, an IT organization cannot simply maintain a traditional focus on systems management. IT services must be developed and made more efficient to help optimize services that create revenue opportunities for the organization. To put it another way, an organization must deploy a service oriented technology platform that is the IT equivalent of enterprise resource planning (ERP) – a platform that can automate and integrate key IT management processes, data stores and organizational constructs to enable the organization to respond optimally to fluctuating business demand.

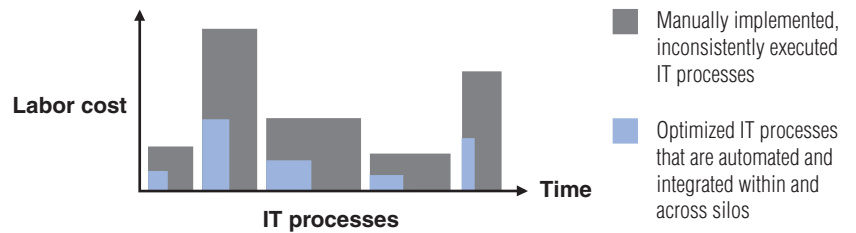
To establish this platform, many organizations have turned to the IT Infrastructure Library® (ITIL®), which provides a best-practices process model. Although ITIL explains what an organization should do, it doesn't specify **how** to use the ITIL model to develop the unique ways that each organization:

- Delivers and supports services.
- Deploys new services.
- Manages relationships between business units.
- Leverages information to drive business agility and resilience.

Moving from the environments most IT organizations have today to implementing the best practices that ITIL describes involves several challenges. The challenges become clear when we look at workflows and exchanges of information across traditional IT silos.

Understand the strategy for overcoming traditional IT silos

To support business services that rely on a complex matrix of people, process, information and technology across the enterprise, IT departments frequently must maintain, coordinate and manage an overly complex, heterogeneous IT infrastructure. In the past, each business unit and functional group across the enterprise purchased and maintained its own technology. Today IT must coordinate efforts across these silos. When organizations and processes are not well established, this coordination may occur very slowly and inefficiently. Achieving compliance with policies and audit requests is the most acute example of how cross-enterprise demands quickly outstrip the capabilities of traditional IT management models.



Automating and integrating IT processes within and across IT silos help minimize the time and labor cost of common IT processes such as availability management, storage management, configuration management, change and release management, and many more.

Highlights

A process model like ITIL provides a rough outline for addressing the problem. But organizations also need:

- *A common data model* that enables the disparate silos to use the same information — and to use the shared information to deliver IT services consistently.
- *Detailed workflows* that move the information between processes and departments to help deliver services to business units.

On the following pages, you'll see how IBM solutions can help turn the ITIL process model into a workable framework. Today IBM delivers the range of products needed to make this vision into a reality.

Have access to all the products and services needed to effectively implement the solution

IBM IT Service Management provides a modular approach that any business can use to deliver efficient and effective IT services

IBM IT Service Management provides a modular approach that any business — from the smallest to the largest — can use to help deliver IT services efficiently and effectively. It is designed to help companies in their efforts to drive flexibility and cost reduction and address regulatory compliance. And it helps transform IT management by optimizing the intersections between the dimensions of service delivery: people, process, information and technology.

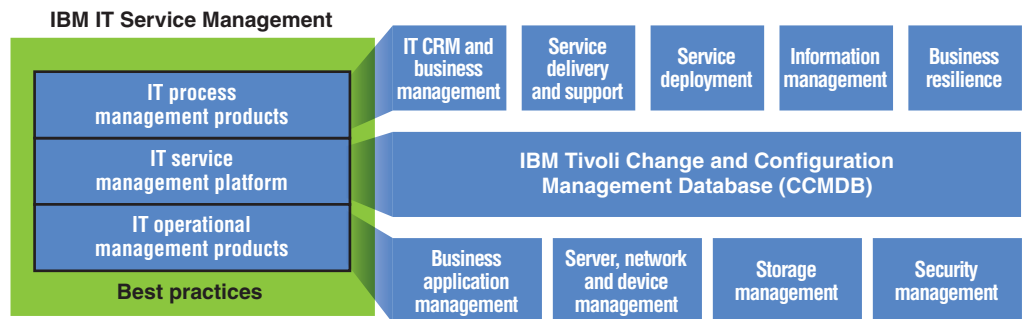
IBM IT Service Management:

- *Helps optimize information sharing* between people, processes and technology.
- *Facilitates collaboration* across the organization by establishing clear decision-making processes.
- *Automates and integrates IT processes* in alignment with business priorities.

IBM recognizes the need not only for a process model but also for a common data model and best-practice workflows. IBM offers a comprehensive suite of IT service management products and services. Products can be broken down into three main categories:

- IT process management products
- IT service management platform
- IT operational management products

A comprehensive approach to IT service management



Highlights

Highly configurable and dynamic, Tivoli Process Management products integrate with IBM and non-IBM products and can adapt to your environment

IT process management products

To make the best use of the information in IBM Tivoli® Change and Configuration Management Database (CCMDB) – and support efforts to drive rapid response and business flexibility – organizations can use IBM Tivoli Process Management products to consistently execute, automate and improve management processes. These products are packaged workflows based on IBM self-managing technology and years of experience developed using best practices in customer environments. But Tivoli Process Management products are also highly configurable and dynamic: they integrate with both IBM and non-IBM products and can be adapted to each organization’s unique environment.

IT service management platform

At the heart of IBM IT Service Management (diagram on page 7) is the open standards-based and federated Tivoli CCMDB. It provides the focal point not only for coordinating disparate data sources throughout the enterprise but also for establishing control over the collection, storage and use of information. Tivoli CCMDB integrates with process management products to drive process automation and centralize policy enforcement. And it interfaces with the operational management products (OMPs) that an organization uses today.

IT operational management products

Organizations already have made large investments in IT solutions for enterprise monitoring, storage management and so on. IBM focuses not on replacing those investments, but on integrating them – extending their value by sharing the valuable information in them with multiple groups and technologies. IBM also offers a full range of best-of-breed OMPs that an organization can use to fill in operational management gaps.

The IBM IT Service Management portfolio is built on:

- A service oriented architecture (SOA) infrastructure, which the portfolio helps manage and secure.
- The world-class, commonly used IBM WebSphere® development and integration platform, which enables many organizations to use the same platform and skill set to build business solutions and drive IT infrastructure solutions.
- Self-managing autonomic technologies and best practices.
- Proven technology for integrating everything from processes to products, including those from many third-party vendors.
- A suite of IT service management and ITIL services that range from development of strategy and design to implementation to ongoing support and management services.

IBM IT Service Management best practices — an integral part of the IBM solution

An integral part of the IBM IT Service Management solution includes intellectual capital based on proven best practices and standards.

Examples include the following:

- *IBM Tivoli Unified Process model* provides information about process roles and responsibilities, work products and supporting products. *IBM Tivoli Unified Process Composer*, an extended version of Tivoli Unified Process model, allows organizations to document their unique processes or design new ones based on its best-practices knowledge database.
- *IBM Open Process Automation Library* allows IBM, its customers and IBM Business Partners to share new supporting technology in an open manner.
- *IBM Global Services* consultants and a wealth of system integrators and IBM Business Partners serve as key resources and a crucial component of the IBM IT Service Management strategy.

IBM offers hands-on consultative services that enable businesses to develop the most appropriate approach for their organizational needs, whether it is very broad or specific to a certain project area. IBM also can provide guidance about the optimal infrastructure design supporting an organization's overall IT service management objectives. Once a strategy and design have been determined, IBM implementation services can smooth the transition to an updated or new infrastructure. Lastly, ongoing support and management can help organizations continue to maintain or evolve their IT service management infrastructures.

Work with a vendor that also fully integrates these wide-ranging products

The integration of process, service and operational management is critical to running IT as a business. In addition to helping organizations manage each of these three areas, IBM has also integrated its products in a number of different ways:

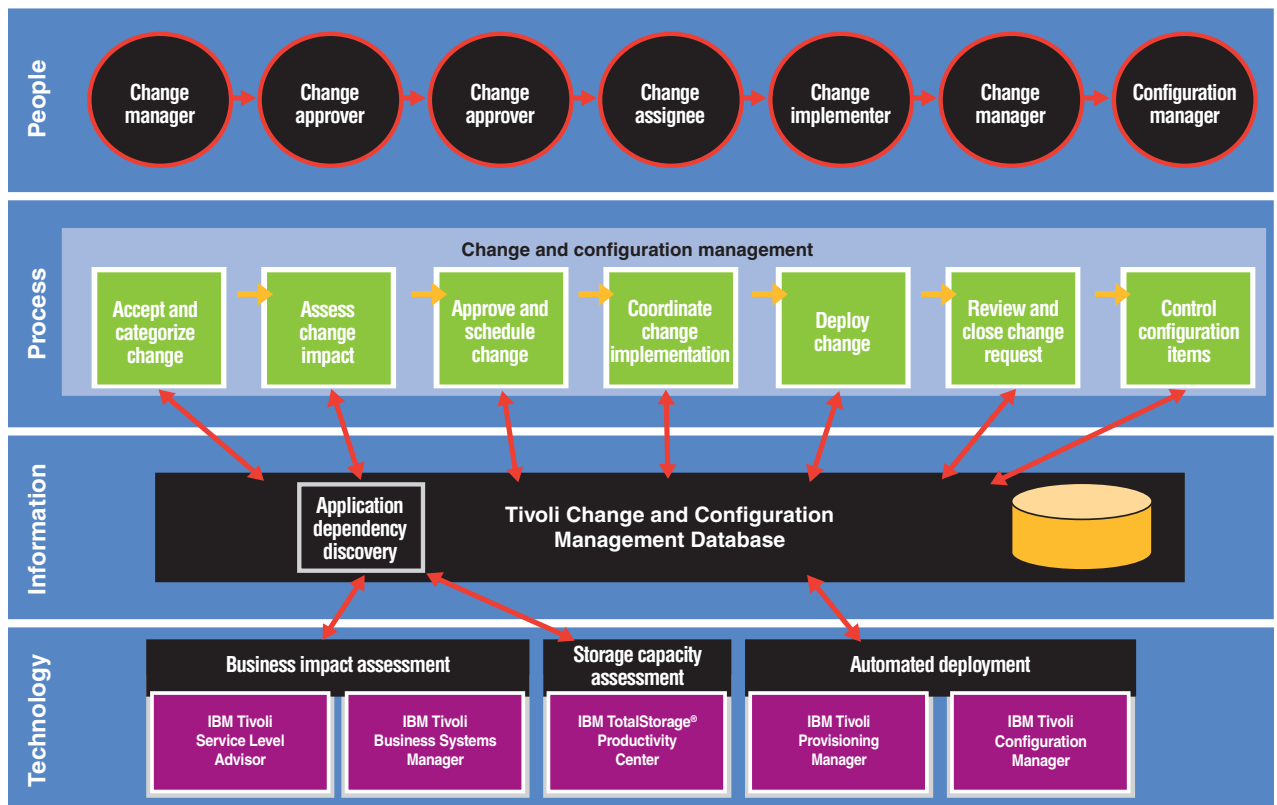
- *Data integration* — Tivoli Change and Configuration Management Database serves as a true, authoritative source of record that even the most complex organizations can use to proactively maintain and share up-to-date, accurate information.
- *Workflow integration* — the tight integration between Tivoli Process Management products and Tivoli CCMDB enables process management products to coordinate with each other and share data. Plus, the database's automated change and configuration management process helps maintain the integrity and consistency of configuration items.
- *Task integration and automation* — the world-class integration capabilities of the WebSphere platform help Tivoli Process Management products and IBM OMPs integrate specific process tasks, which can also be automated by IBM OMPs.
- *Policy integration* — true IT service management and compliance requirements both demand an organization to understand and enforce its business and IT policies. Tivoli CCMDB serves as a centralized point for verifying the consistent application of that policy.

By using IBM solutions to integrate across all these dimensions, organizations can drive IT to the next level. The following scenarios give more specific examples of how IBM IT Service Management helps organizations optimize the integration of people, process, information and technology.

Scenario #1: Implementing a new Web site

Ideally, IT organizations would manage changes with a consistent, optimized process. Handling a request to create a new Web site provides a familiar example of a change that IT must manage. The following diagram depicts how IBM IT Service Management helps automate this request for change.

IT service management automates change management



The top layer of the diagram on page 11 shows the typical people involved in getting the change implemented. The *change approver* would use information stored in Tivoli Change and Configuration Management Database to determine the impact that the change will have on the service the application supports, as well as service level objectives. If the change is approved, the *change assignee* would build test and rollout plans, then store them in Tivoli CCMDB so that all involved parties can access them easily. To coordinate deployment of the change with operations, the *change implementer* would use task automation capabilities from products such as IBM Tivoli Provisioning Manager and IBM Tivoli Configuration Manager. And when the change has been implemented, the change manager would use Tivoli CCMDB to verify deployment, review the change and close the request for change.

At each step of the automated process – shown in the second layer of the diagram – these people would use the change management process capabilities that are part of Tivoli CCMDB as well as the IBM Tivoli Release Process Manager to consistently follow the organization’s clearly defined best practices.

The third layer of the diagram represents the up-to-date information that all the other layers contribute to and use. It is important to note that not only does Tivoli CCMDB serve as the source of record, it also enables verification that a change has the intended impact – and, if not, facilitates analysis of the reasons why. That is crucial information to have if an organization truly wants to manage its IT services.

At the bottom of the diagram is the technology from IBM and other vendors used for business impact assessment, storage capacity assessment and automated deployment.

Scenario #2: Managing availability

To deliver the highest possible levels of availability and performance, an IT organization must respond quickly when incidents occur and restore normal service operation as soon as possible with minimum disruption to the business. IBM IT Service Management helps an organization:

- Get the right people involved at the right time.
- Execute the proper workflow, from impact analysis and prioritization through root-cause analysis to resolution.
- Deliver access to the information and tools needed to perform process tasks.

As in the previous scenario, IBM IT Service Management helps coordinate all of these layers: people, process, information and technology. In this scenario, after an incident has been detected and recorded, perhaps in a service desk tool such as IBM Tivoli Information Management for z/OS[®], it must be classified, categorized and prioritized. To avoid routing incidents to the wrong resources and to immediately address incidents that affect critical

Highlights

IBM's strategy and offerings help companies automate and integrate key IT processes and automatically share information across areas

business services and service level agreements, IBM tools help incident assignees and analysts rapidly and accurately perform a number of steps:

- Determine the business impact using IBM Tivoli Availability Process Manager.
- Categorize the incident using the resource relationship information in Tivoli Change and Configuration Management Database and status information from OMPs such as IBM Tivoli Monitoring and IBM Tivoli Composite Application Manager for Response Time Tracking.
- Align the incident priority with business needs using information about business impact and service level agreement status from OMPs such as IBM Tivoli Business Systems Manager and IBM Tivoli Service Level Advisor.

Conclusion

IBM has the strategy and the offerings to help companies automate and integrate key IT processes and automatically share information across areas – today. Furthermore, IBM IT Service Management is open and flexible, allowing organizations to derive greater value from their existing assets and to use one of many entry points, depending on business needs and priorities.

As a result, IBM IT Service Management helps organizations:

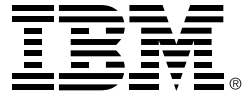
- Effectively manage IT in alignment with rapidly changing business conditions and demands.
- Minimize the time and cost associated with IT operations to facilitate greater IT support for high-value business initiatives.
- Achieve an end-to-end, integrated view of the IT environment — at and across the operational management, service platform and process management levels.
- Consistently execute best practices for delivering IT services.

Enable IT to deliver services to the business more efficiently. Help meet business service demands while minimizing costs.

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For more information

To learn more about how you can get started with IBM IT Service Management, please contact your IBM representative or IBM Business Partner, or visit ibm.com/tivoli/features/it-serv-mgmt



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*Forrester Research. "US IT Spending Benchmarks For 2005." May 24, 2005.