



Give your business what it wants—  
 implementing continual service  
 improvement with ITIL Version 3  
 White paper



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“A significant amount of data is collated and monitored by IT in the daily delivery of quality service to the business; however, only a small subset is of real interest and importance to the business. The majority of data and its meaning are more suited to the internal management needs of IT. The business likes to see a historical representation of the past period’s ‘performance’ that portrays their experience; however, it is more concerned with those historical events that continue to be a threat going forward, and how IT intends to militate against such threats.”

—Continual Service Improvement, ITIL Version 3,  
Office of Government and Commerce (OGC)

## Introduction

The role of information technology (IT) is changing. No longer is the IT department responsible only for technology. As businesses strive to increase efficiency, more and more processes are digitized. In 2006, the MIT Center for Information Systems Research surveyed 103 U.S. and European companies about IT and IT-enabled business processes. They found “34 percent of those companies have digitized (all of) their core business processes.”<sup>1</sup> For companies like these, work-arounds aren’t an option. Critical business processes are forced to stop when any element of a service is unavailable. And the IT organization is on the front line.

Businesses are dependent upon their own IT organization to satisfy corporate governance objectives, deliver competitive advantage and meet increasing customer demand for 24x7 services. IT departments are forced to demonstrate accountability with business resources—in particular, they must improve competitive advantage by driving business effectiveness and efficiency.

All the attention now placed on the business value of IT also creates the need to demonstrate service quality. Managing the quality of IT services can unlock increased business effectiveness and drive expense reduction while conforming to corporate governance. This is true regardless of the type or size of the organization.

This white paper details why many IT organizations have so far failed to create a culture of continual service improvement and how vanguard organizations use continual service improvement as part of their IT management processes.

## ITIL best practices

Chief information officers (CIOs) want to adopt best practices that will improve the quality of their services. One popular example of a best practice benchmark is the IT Infrastructure Library (ITIL®) developed by the British government to improve IT quality and consistency across their organizations. Over the past 15 years, ITIL has evolved to meet changing business demands. The UK’s Office of government Commerce recently published the third version—ITIL Version 3-set of best practices for service management. Recognizing that a major emphasis needs to be placed on the alignment of IT services with business needs, two of the five volumes are now dedicated to service operations and continual service improvement.

These two volumes concentrate on running services that the business wants and continually improving those services to be in line with current or revised business needs. In short, ITIL Version 3 is focused on building an effective interface between the business and the IT department. Only when the IT department understands what the business needs and wants can it benchmark itself and build continual improvement plans that meet business demands.

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<sup>1</sup>Enterprise Architecture as Strategy, Jeanne Ross, Peter Weill and David Robertson, Harvard Business School Press, 2006, Page 2

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This approach to service management clearly demonstrates how IT departments can effectively benchmark and measure success, and how to manage required improvements. Many IT departments have failed to put in place any system to measure and improve service management, even though it was the first standard recommended to specifically measure the quality of an IT department.

ITIL Version 3 standards are designed to help IT departments have a quality culture that is based on a lifecycle such as the Deming Cycle, which advocates a continual improvement methodology. ITIL Version 3 has picked up on International Organization for Standardization/International Electrotechnical Commission (ISO/IEC) 20000 and has emphasized this need for continual improvement to be a core part of the IT culture.

## Delivering ITIL

Since the tech bubble burst, IT organizations have paid a high price for their culture of isolation. In many cases they were forced to accept large budget cuts. Those cuts were partially due to business adapting to competitive market pressure, but more often cuts were made in response to the lack of perceived value from a business perspective. Even though many IT departments had made large investments in tools, data warehouses and clever dashboards, they were simply unable to communicate in terms that the business could understand or value. They were unable to demonstrate effective management of IT services due to their inability to connect the people, processes and technology that make up any IT service.

IT departments failed to communicate with their business sponsors because they neglected to meet with the business and understand how to align IT operations with business needs and priorities.

To become valued and productive, IT departments need to focus on three areas of operations:

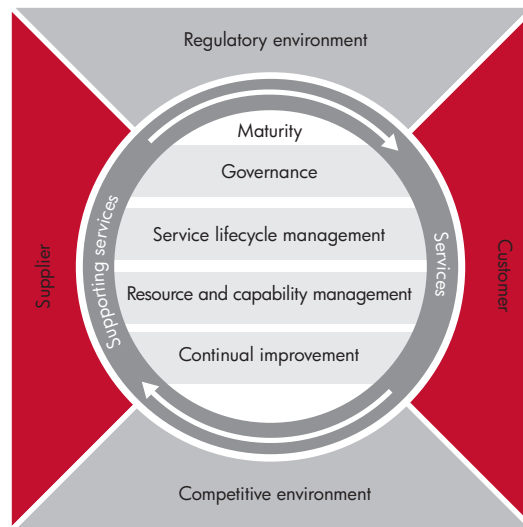
- Service metrics (service-level agreements (SLAs) with the business)
- Process metrics (show the efficiency and effectiveness of the IT department)
- Operational metrics (capacity, performance)

In many cases IT jumped to a technology-based solution far too quickly without putting in place a set of operational processes to drive alignment with the business. ITIL Version 3 recommends processes that create alignment and forms the basis for a service management system that helps IT deliver exactly what the business requires.

HP recommends the following key elements of a service management system for its Level 1 service management framework:

- **Governance and strategic management**—Defines the strategy of the organization and directs its execution to achieve business goals. Governance includes defining roles, responsibilities and controls, managing the service portfolio, measuring and reporting, and taking actions to resolve any issues identified. Governance enables a service provider to direct and steer the service management system.
- **Service lifecycle management**—Provides end-to-end management of services across their lifecycle and across the resources and capabilities that make up the services. Service lifecycle management includes managing a service catalog, service level agreements, services and underpinning contracts. It enables a service provider to offer consistent and agreed-upon output while balancing time, cost and quality.
- **Resource and capability management**—Provides end-to-end management of individual resources and capabilities (people, process, technology and information) across their lifecycle. The service helps the provider optimize resources, grow capabilities and reduce costs within the context of predetermined service level agreements.
- **Continual improvement**—Identifies, prioritizes and implements improvements to the service management system. Performance is continually measured and improvements are made to services, resources and capabilities to help increase efficiency and effectiveness.
- **Maturity**—Measures how reliable, efficient and effective the service management system is, and how well its building blocks are integrated. The most mature service management system is closely aligned to business objectives and business strategy, supported by a continual improvement cycle, and is well organized to provide consistent, predictable, agreed-upon services.

Figure 1. HP service management framework



By implementing these key elements IT will start to drive its alignment to the business in terms that the business will understand and value. The governance and strategic management element helps determine which areas need focus from a business perspective. Focusing on these areas allows the continual improvement element to generate the correct actions to drive metrics that the business requires. This helps reduce risk, improve quality and reduce costs in the IT department.

The first thing to happen once this process is in place is that IT will start to report in outward-facing terms that the business can understand. This makes IT measurement comprehensible to both customers and senior IT managers.

Second, senior managers will start to report metrics that demonstrate how IT is a good steward of business resources. In a world where IT organizations increasingly have credible competition, a clear view of performance is a must.

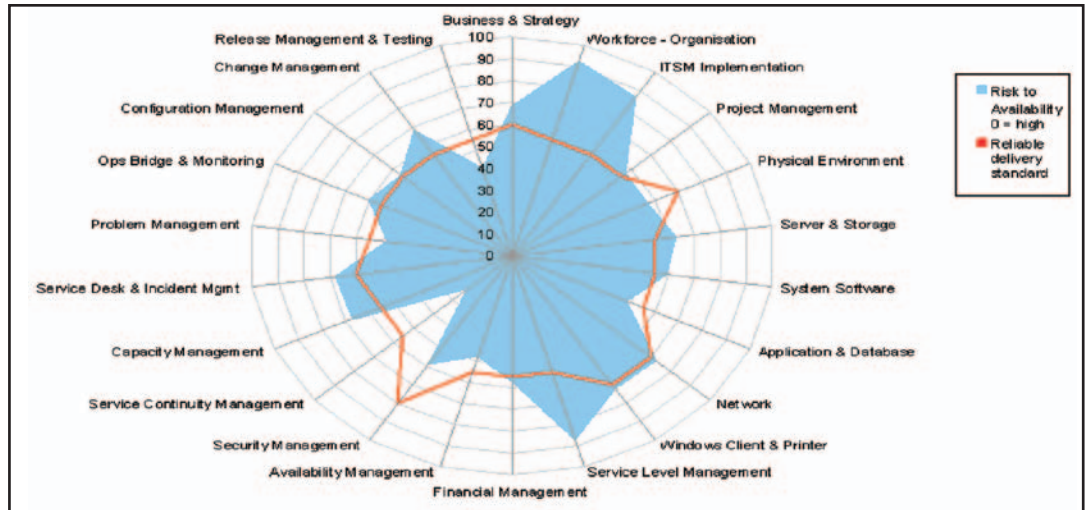
IT reporting has not historically created the transparency customers need and the benchmarking management demands. To remedy this, IT organizations must create and manage to concrete goals. They must show that their actions truly improve the quality and cost of IT service delivery. IT departments need to show that they are actively working to improve process efficiency and process effectiveness. This includes demonstrating they are doing the right things in the right way.

## Running services the business wants

An IT department needs to build a service management system that delivers services the business wants, at a price they are prepared to pay. Services need to be managed over their entire lifecycle with IT designing and meeting the initial requirements of the business and then adding or deleting resources according to changing business demands, and eventually retiring the service when it is no longer needed.

To give the business what it wants, IT needs to create a comprehensive service catalog that describes all the services available to the business. Each of the IT services needs to be documented with an SLA that describes the performance, including capacity levels, availability, and continuity plans with backup and recovery objectives. The IT department should have key performance indicators (KPIs) in place that detail how quickly it can complete SLAs. These KPIs should be agreed upon by IT and its business customer for all entries in the service catalog. Each SLA is then reviewed with its business sponsor(s) on a regular basis to confirm that the business requirements are still correct. The IT department should also identify the current risks to successful delivery of the specific service and document actions needed to eliminate or reduce those risks to an acceptable level. The diagram shows potential areas of risk to meeting the availability SLA as any area that doesn't touch the red target line.

Figure 2. Risks to availability SLA



In many cases the IT department is unable to articulate what the risks are and what their potential impact is to the business. Building a continual improvement culture requires the IT department to evaluate every aspect of its performance (people, process and technology) in an objective manner against the SLA required. While it is possible to perform a self assessment (possibly using the templates available from itSMF websites),<sup>2</sup> few if any organizations have an objective scoring mechanism that allows consistent evaluation against SLAs. Without this, it is all but impossible to build a service improvement plan with the correct prioritized actions to achieve the SLA without over-performance that can result in unnecessary spend.

We recommend that the IT department go one step further and define the KPIs that it will use to measure its performance of each element of its service management system. This can be used as the balanced scorecard for the IT department and is a strong indicator of the overall health of the IT operation.

## Fixing IT measurement and management

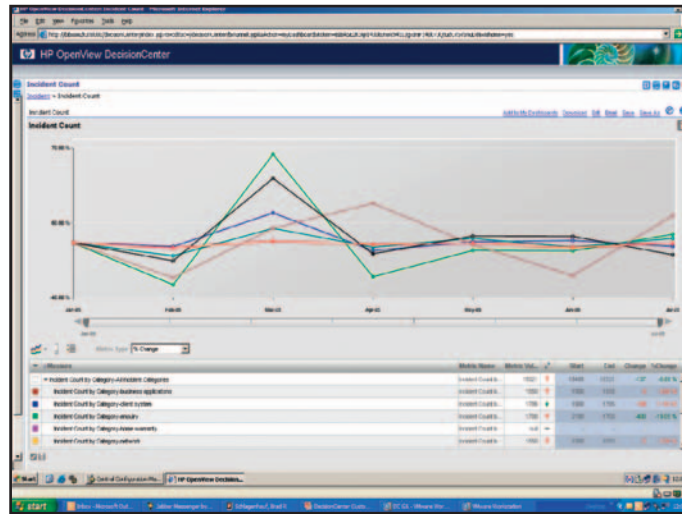
How do you find the metrics that address the concerns management has? The answer involves taking an outward versus an inward perspective to IT business intelligence—starting with service level agreements (SLAs). Many IT departments fail to get clear SLAs determined with their own organization. Partly because they can't articulate the risk—and business can't articulate what it wants.

IT departments can help solve this problem by creating a data warehouse of historical performance data and delivering a set of IT process-based metrics that report process quality and service quality over time. These analytics help IT managers create process-related dashboards that quickly show which processes are working and which are not.

This approach is in clear contrast to tactical console functions. Typically, management used historically based analytics to facilitate process maturity. However, in today's ever-changing and always-demanding business environment, true "management by exception" is a necessity. To be a successful and valued IT department involves moving away from providing raw data and toward proving your worth by demonstrating a percentage of change to an analytic.

<sup>2</sup>itSMF – IT Service Management Forum [www.itsmf.com](http://www.itsmf.com)

**Figure 3.** Percentage of change in incident count by category



This view stems from control theory where you see which process elements are stable and which are unstable. In the above metric view, the “enquiry” category shows instability. Viewing average resolution times shows the same problem. Focusing attention on this area which lacks stability enables process improvement and helps improve service process quality and cost. Fixing things here could be as simple as training to reduce escalation errors.

But this step alone does not help IT completely demonstrate its value to the business. IT must also create process improvement objectives. That way the business can understand the IT department’s plan and the progress made toward it. This can create unity not only with the business, but within IT itself.

Along with these steps, the ITIL Version 3 continual service improvement volume provides several additional areas of IT service improvement:

- Improvement of each phase of service management
- Improvement of the service
- Improvement of individual activities
- Improvement of overall IT cost effectiveness

Unification with IT is facilitated by cascading scorecards. The value created by aligning the IT organization around goals, objectives and measurement is enormous. This change can effectively put IT in the same playbook with management. Imagine, in any sport, the difficulties that arise when players operate from different playbooks—this is the world of IT today.

“Once a Balanced Scorecard has been defined at the strategic business unit level, it can then be cascaded down through the organization. For each strategic business level measure and related target, business units can define additional measures and targets that support the strategic goal and target. In addition, action plans and resource allocation decisions can be made with reference to how they contribute to the Strategic Balanced Scorecard.”<sup>3</sup>

Balanced scorecards are not new—they were developed by Robert S. Kaplan and David P. Norton in the 1980s. However, their application to IT is still relatively new. In this approach, once top IT management shares its strategy and objectives, each subsequent IT management layer can add to the goals and determine how it will assess the processes that it is responsible for managing. Each group determines objectives for metrics that match the critical success factors for each goal. These key performance indicators allow the IT organization to manage to objectives—just like the rest of business. They also enable the business to track IT progress as an interested stakeholder.

By using IT objectives to determine a continuous service improvement framework, it becomes possible to find trends and take corrective action to make sure goals are driven back to objectives. By cascading everything together, a common IT playbook is created. This can drive out cross-departmental inefficiency, since common goals are created and shared across the entire IT department.

<sup>3</sup>The Continuous Service Improvement Manual Draft, ITIL Version 3, page 129

Figure 4. Example of CIO scorecard

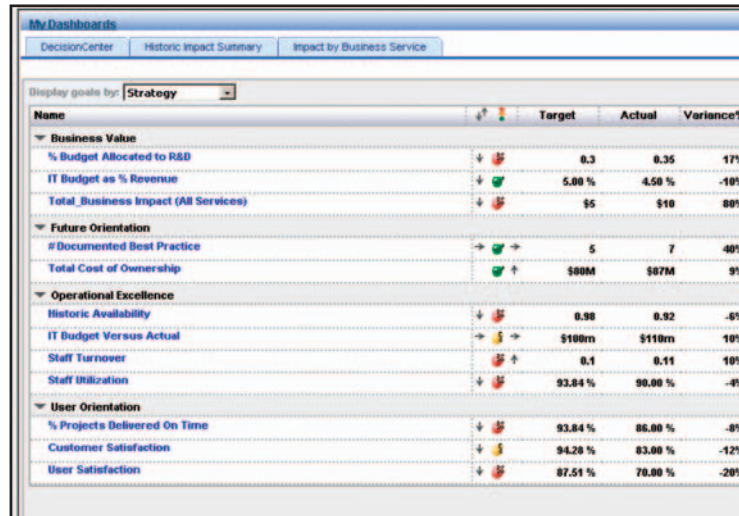


Table 1. Critical success factors and metrics

Critical success factors	Metrics
Ability to detect incidents as early as possible	Total numbers of incidents (as a control measure)
Availability of information about problems and known errors and incidents Ability to track the status of resolutions	Mean elapsed time to achieve incident resolution or circumvention broken down by impact code
Integration into the configuration management database to determine relationships between incidents Ability to refer to the history of CIS when performing first-line support	Percentage of incidents handled within agreed response time (incident response-time targets may be specified in SLAs or by impact and urgency codes)
Integration into the service level management process	Average cost per incident Percentage of incidents closed by the service desk without reference to other levels of support

## Driving continual service improvement

Creating a continual service improvement solution starts by determining which process analytics (metrics and reports) are needed to support the management of each IT process. In the language of ITIL Version 3, this starts by looking at service strategy, service design, service transition, and service operations and then at the discrete processes contained within them. For example, service operations includes: service access, service desk, event management, incident management, problem management, change management and project management. ITIL Version 3 defines critical success factors, key performance indicators and metrics for each of these.

Creating data-marts of process-based metrics helps create continual service improvement.

For each of the process categories, ITIL Version 3 has identified a natural set of critical success factors and metrics. For some of these categories, the data is hard to get—for other categories, it's not. The trick is to develop a continuous service improvement plan that will remain relevant to the organization as well as its goals and objectives. To be fair, this means that the plan will change over time as process maturity occurs. This is how regular assessment can play a continuing and valuable role in providing guidance on appropriate metrics.

**Figure 5.** View of the scorecard and dashboard for the director of customer support



## IT roles, measurement and management

Once appropriate measures are created, each functional role needs to build off a set of scorecard dashboard templates. These templates are meant to be starting points and can be easily changed as process maturity occurs.

From a sustaining IT perspective, typical roles include the CIO, service desk manager, service level manager, operations manager, incident manager and change manager. The objective here is to eliminate the cumbersome reporting cycle while empowering IT managers to make decisions faster and to give customers a constructive view into IT performance. Although customers may not understand all metrics, they will understand how and why IT is improving or losing ground.

Here is an example of the tabbed scorecard dashboard interface. The front tab shows a scorecard (see figure 2) while the service desk, incident management and problem dashboards provide a historical view of key role-based metrics. While the scorecard will show how you are doing against goals, the dashboards will enable drill-downs into details about related factors.

## Conclusion

It's a new day for IT organizations. They need to clearly demonstrate to themselves and to their customers that they are truly managing their business. The focus is on driving process quality and process cost reduction. Crucial to this is the notion of benchmarking, creating tools that help manage to objectives and aligning IT teams. In this white paper, we described these key elements and explained the steps involved in creating a solution.

## For more information

To learn more about HP software solutions contact your local HP representative or visit [www.hp.com/go/software](http://www.hp.com/go/software).

For more information about HP Service management framework, please visit <http://h20219.www2.hp.com/services/cache/523406-0-0-225-121.html>.

HP ITSM Assessments can be found at <http://h20219.www2.hp.com/services/cache/268967-0-0-225-121.html>.

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