



## Why You Should Take a Holistic Approach to ITIL® and Service Support

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## Executive Summary

In these tough economic times, how do you address the challenge of reducing costs without diminishing your ability to deliver more IT services and provide a higher level of service quality? Fortunately, by improving service support, you can substantially reduce costs related to the service desk, incident management, problem management, change management, configuration management, and asset management. Companies can lower service support costs significantly and meet the growing demand for new and improved services by taking a more holistic approach to service support.

Here are some examples of how looking at the big picture has helped companies reap the benefits of improved service support:

- > A large financial services company decreased the number of calls per user to the help desk by 15 percent and the number of escalations from first- to second-level support by 10 percent. This resulted in an overall support cost reduction of 15 percent.
- > When consolidation increased the help desk call volume at a worldwide pharmaceutical company by 25 percent, the company absorbed the increase without hiring additional staff and still maintained its goal of a 75 percent first-call resolution rate.
- > A large insurance company processes the same volume of incident tickets as in the past — but with 25 percent fewer people, resulting in an annual cost reduction of more than \$2,500,000. The organization redeployed those people to more strategic projects, increasing the business value of IT.

How are these organizations able to achieve these results? They have transitioned from a siloed approach to service support to a more collaborative, unified approach. This involves the following:

- > Integrating service support processes within and across service support functions to eliminate the inefficiencies and errors that happen when people work in silos
- > Giving all service support functions access to a comprehensive, consistent, and up-to-date view of the IT environment, which facilitates better-informed decision making
- > Increasing the scope of automation of service support processes — such as by enabling user self service — to free up the service support staff for more strategic work

Instead of cobbling together separate point solutions for service support management, these successful organizations have taken a holistic and unified approach. They have deployed a set of tightly integrated IT service management solutions that automate, integrate, and optimize processes. In essence, a tightly integrated solution set appears to the service support organization as a single, unified service support solution. It provides role-based service support functionality that orchestrates and captures activity from a broad set of users — from outsourced service desk operators, to Level 4 technical specialists in IT operations, to business end users.

This paper does the following:

- > Discusses the importance of taking a unified approach to service support management
- > Describes how a holistic methodology can help service support organizations drive down costs, increase and improve service delivery, and measure and communicate success in contributing to business value
- > Describes the main principles of this approach
- > Discusses what to look for in a service support solution
- > Presents the resulting business benefits

## Moving to a Holistic Service Support Approach

In the past, service support organizations have had to rely on point solutions for different service support functions. These solutions may have best-in-class feature sets. However, point solutions break up service support into process and data silos, which result in inefficiencies and higher costs. In these situations, the IT service support staff has to maintain multiple tools and corresponding skill sets. That drives up purchase and maintenance costs while increasing staffing levels and training requirements.

In addition, the service support staff has to maintain multiple scattered data stores that have different data models. Each data store provides only a partial view of the IT environment, which hinders effective decision making. The IT staff must manually consolidate and synchronize data across multiple sources to gain a broader view. These manual processes are labor intensive and error prone. Also, data may drift out of synchronization, so different service support functions may be working with different versions of data.

If you want to drive down service support costs while at the same time improve service, you should take a holistic and unified approach to service management. That involves making three major improvements to the siloed approach:

- > Optimizing processes by integrating them within and across the various service support functions
- > Providing all service support functions with the same comprehensive and holistic view of the IT environment
- > Extending the level of process automation, including the automation of processes that span multiple functions

### Optimize and Integrate Processes

In many IT organizations, the different functional groups within the service support organization operate in silos — service desk, incident management, problem management, change and release management, configuration management, and asset and inventory management. These different groups have had to work with multiple disparate tools and databases, fragmenting service support processes. Consequently, there is little process integration across functions. Manual handoffs obstruct close coordination among functional groups, resulting in inefficiencies and errors that drive up costs.

Many IT organizations are turning to the IT Infrastructure Library® (ITIL®) for guidance in getting the most value from IT service management processes. Process integration is one of the central themes of ITIL. This approach facilitates seamless workflow within and across functional groups in an end-to-end, closed-loop manner. As a result, efficiency increases and the service support staff is more productive, and that drives down costs.

### Provide a Single, Holistic View

A major problem of working in silos is that each service support function has only a partial view of the environment. This view should include the business, IT, and other areas so that IT can understand the relationships of all the pieces to help the business run successfully. The service desk, for example, may not have access to support the contract information maintained in an asset database. Without this information, service desk technicians cannot determine user support entitlement. They cannot quickly direct calls to the proper support source. As another example, the asset management team may not have access to incident and problem information. Without this information, the team cannot readily determine the support cost of assets and would not have a complete picture of the total cost of ownership (TCO).

All functional groups in the service support organization require a single, holistic, and comprehensive view of the environment. This view ensures that all members of the service support staff have the information they need to perform their jobs efficiently and effectively. It also ensures that all functional groups are working with the same consistent data.

A single view permits the service support staff to roll up metrics and key performance indicators (KPIs) that span functional areas. This ability allows the staff to communicate the value of service support using metrics and KPIs that are meaningful to the business. For example, the staff can show a decrease in problem incidents caused by failed changes and the resulting service improvements. They can also get a better handle on the TCO of assets through the ability to roll up asset maintenance and support costs.

The view must be comprehensive. It must show all the resources in the IT environment — technology, processes, and people — and include attributes of those resources,

such as configuration data, incident and problem data, and change data. The view also needs to show the relationships among resources, including the physical and logical relationships of the technology components, the relationships of the technology components to business users, and the relationships of the technology components to support personnel.

In addition, the view should show the relationships of the resources to the business services they support, providing service support with a customer view of the services IT delivers. This customer view enables the service support staff to operate from a service perspective, rather than from a technology perspective.

Operating from a business perspective is a fundamental concept of ITIL Version 3 (V3). It's also essential for achieving effective Business Service Management (BSM) from BMC Software, which is a comprehensive approach and unified platform for running IT that reduces cost and maximizes business value. BSM combines best-practice IT processes (including support for ITIL), automated technology management, and a shared view of how IT resources directly support the business. This comprehensive approach and unified platform for running IT reduces costs and maximizes business value.

By understanding the relationships among IT resources and services, the service support staff can establish priorities focusing on issues that have the highest value to the business. A service relationship view also permits the staff to make better-informed decisions. For example, the change management team can quickly assess the service impact of planned changes and proceed accordingly. If the team is planning a change to a server, they can see the services that the server supports prior to making the change and thereby gauge the impact of the change on the business.

### Extend Process Automation

Another means of driving down service support costs is by extending automation to eliminate manual processes wherever possible. Point solutions are available that automate actions within specific processes. What is required, however, is the extension of automation to include three levels:

- > Automation of actions within processes
- > Automation of an entire process within a service support function
- > End-to-end automation of a process set that spans multiple service support functions

Being able to automate incident matching is an example of automating an activity within an incident management process. Automating incident flow from capture to resolution is an example of automating an entire process within a service support function. Finally, automating the entire procedure — from receipt of an event-based incident, to problem management, to change management — provides an example of end-to-end automation of a process that spans multiple support functions.

Automation delivers many benefits. It relieves the service support staff from performing many mundane and repetitive manual tasks, eliminating the delays and errors inherent in manual work. This capability frees up substantial staff time for more strategic endeavors and also enforces the use of best practices.

The ability to automate processes that span multiple service support functions makes possible such cost-saving capabilities as self-service. For example, you can automate service request and fulfillment, enabling users to request services and check the status of their requests on their own. The solution automatically executes the fulfillment process, gathering the necessary approvals, initiating and orchestrating the necessary fulfillment tasks, and tracking progress. Self-service takes a huge load off of the service desk because users no longer have to call the service desk for services they can perform themselves. That increases the productivity of the service desk staff.

It's also important to automate the documentation of processes and audit trails. That drives down the costs of compliance audits.

By extending process automation, you can lower service support costs and still keep up with business demand and technology changes, without negatively affecting service quality. As a result, you can meet the increasing demand for service support without adding people.

### Laying the Technological Foundation

You need to select and deploy IT service management technology that enables you to implement the holistic, service-oriented approach discussed in the previous section. The technology must make it possible for you to implement the three dimensions of the approach: integrate processes within and across service support functions; provide a

comprehensive, holistic view of the IT environment; and extend process automation.

The most effective and efficient approach is to implement a solution suite that meets the needs of the entire service support organization, rather than attempting to combine individual point products. A single solution suite ensures tight integration of the service support solutions. It speeds solution deployment, resulting in a faster time-to-value. Using a single solution suite also lowers the total cost of ownership.

This section presents the criteria that a solution suite must meet to deliver the required capabilities.

### **Seamless Integration of Solutions**

All solutions in the suite must be tightly integrated to permit integration of the processes the solutions support. Tight integration cannot be achieved as an afterthought. That's why it's important to look for a suite in which all solutions have been built together, from the ground up, to create a unified process model, data model, and user interface.

A unified process model, one that transcends service support functional groups, eliminates the inefficiencies of siloed models. By using a unified process model, you eliminate the need to maintain and synchronize multiple data stores. A unified user interface offers a consistent look and feel across all solutions in the suite. That consistency minimizes the number of skill sets the staff must maintain and decreases training requirements.

To further ensure tight integration, look for a suite in which all solutions are based on an open, unified architecture and are built on the same platform. A single architecture and single platform facilitate deployment by eliminating the vexing problems and associated costs of cross-architecture, cross-platform integration. A single platform further reduces costs by eliminating the need to purchase, manage, and support multiple platforms.

A tightly integrated suite permits users to take advantage of the capabilities of multiple solutions without continually

switching from one solution to another. For example, a service desk agent can enter a change request directly from the service desk solution. A change management technician can check incident status on a particular change directly from the change management solution. This "in-context switching" boosts the productivity of the service support staff.

In addition to the integration characteristics just mentioned, look for a service support solution suite that integrates service support solutions with solutions used in other IT disciplines, such as service assurance. For example, integration with an infrastructure monitoring and service assurance solution permits the service support organization to move from a reactive to a proactive mode of operating. That's because service assurance provides early warning of issues, allowing the service support staff to address these issues before they affect users.

### **A Well-Architected CMDB**

The solution suite should provide a holistic, consistent, and up-to-date view of the IT environment to all service support personnel. The surest way to meet this important requirement is for all solutions to be built on a single data store. In this way, all users work with the same data. The data store should provide access to all the data needed by the solutions in the suite, including asset data (configuration, support contracts, costs), IT infrastructure component relationship data, incident and problem data, change data, and people data (end users, support staff).

A single data store eliminates the need to deal with multiple databases. The service support staff doesn't have to manually consolidate data from several databases to get needed information, which is a time-consuming and error-prone task. In addition, the staff doesn't have to replicate data in multiple databases and keep the data synchronized.

A well-architected configuration management database (CMDB) provides the ideal technology for a service support database. The CMDB maintains comprehensive data in a single place, so that all solutions in the suite can share the data. It stores all entities — people, processes, and tech-

nology — as configuration items, and it stores attributes about all configuration items. It also maintains important relationship data among the configuration items, including the physical and logical relationships of IT infrastructure components, and the relationships of users and support people to the infrastructure components.

In addition, a well-architected CMDB provides automatic discovery and update of IT infrastructure components to ensure that information is complete, accurate, and current. Automatic discovery also detects changes in the environment, so that the configuration management staff is alerted to any changes that violate standard configurations.

It's important that the CMDB be built on a federated architecture that uses a single, standard data model for all data. Federation eliminates the need to copy all data to the CMDB, yet still provides access to all needed data through the CMDB. A single data model eliminates the arduous task of continually transposing data from one format to another.

### **Extended Process Automation**

Look for a solution that automates and orchestrates service support processes within, as well as across, multiple service support functions. The ability to automate end-to-end processes that span multiple functions makes possible such cost-saving capabilities as user self-service. Extensive automation and orchestration streamlines handoffs among functional groups to maximize efficiency and eliminate errors.

The solution should track the status of processes, such as incident and change request status. It should also document audit trails. For example, it should document each change, indicating who authorized it and when, and who implemented it and when.

It's important that the solution automate processes according to best practices, including the ITIL process guidelines. The solution should also provide documented guidance for any manual processes that remain. These capabilities enforce the use of best practices across the enterprise to maximize efficiency.

### **Service Awareness**

The solution must provide the support staff with a services-oriented view of the IT environment, one that shows the relationships among the IT resources — technology, processes, and people — and the services they support. The view should provide a full definition of each service and indicate all the individual elements required to deliver that service. To meet these requirements, the solution suite should include a service modeling capability that permits the service support staff to model the relationships.

The CMDB is the best place to maintain the modeled relationships. It stores the services as configuration items and maintains the relationships of the service configuration items to the other configuration items. The service modeling capability must be integrated with the CMDB to eliminate the hassles involved when the service model must maintain a separate database.

### **Scalability**

It's important for the solution suite to be built on a distributed architecture that enables the suite to scale from departmental needs to large global enterprise deployments. The architecture should accommodate all service support groups across the enterprise with a single instance of the solution suite — and still deliver agreed-upon performance levels. A single instance eliminates the high costs and coordination problems introduced when multiple instances are required.

Large enterprises may require the single instance of the solution to provide a multi-tenancy capability that personalizes the service to multiple business units and cost centers across ITIL processes. That means the solution must be capable of segregating unique data and workflows by groups, such as business units, cost centers, and user roles. Segregation of data and workflows allows each group to customize the solution for their unique requirements, without affecting other groups.

## Putting It All Together

The combination of tightly integrated solutions, all accessing a single CMDB, orchestrates and automates end-to-end processes in a closed-loop fashion — processes that transcend multiple groups. In the scenario described, the service assurance solution alerts the service support solution suite to a server performance slowdown beyond the limit allowed by the associated service level agreement.

1. The suite automatically generates an incident ticket in the service desk solution; the incident ticket includes forensic information.
2. The service desk agent opens the incident in the service desk solution and, using the forensic information, triages the problem and sends it to the correct problem management person. The service desk solution forwards the incident to the problem management solution and tracks the incident status.
3. The problem management technician uses the forensic information to derive a fix, which requires replacement of the problem server with a higher-capacity server. From the problem management solution, the technician generates a change request to implement the fix. The problem management solution forwards the change request to the change management solution.

4. The change management technician consults the infrastructure view provided by the CMDB and sees that the requested change does not affect any other infrastructure components. She approves the request. In response, the change management solution automatically gathers any other required approvals.
5. The change management solution then forwards the approved request to the operations staff for implementation and tracks change progress. The operations staff makes the requested change.
6. The auto-discovery feature of the CMDB updates the CMDB with the new server configuration.
7. Through the CMDB, the change management solution validates that the change does not violate standard configuration.
8. It then closes the change request in the change management solution.
9. The change management solution closes the associated incident in the service desk solution, closing the loop.

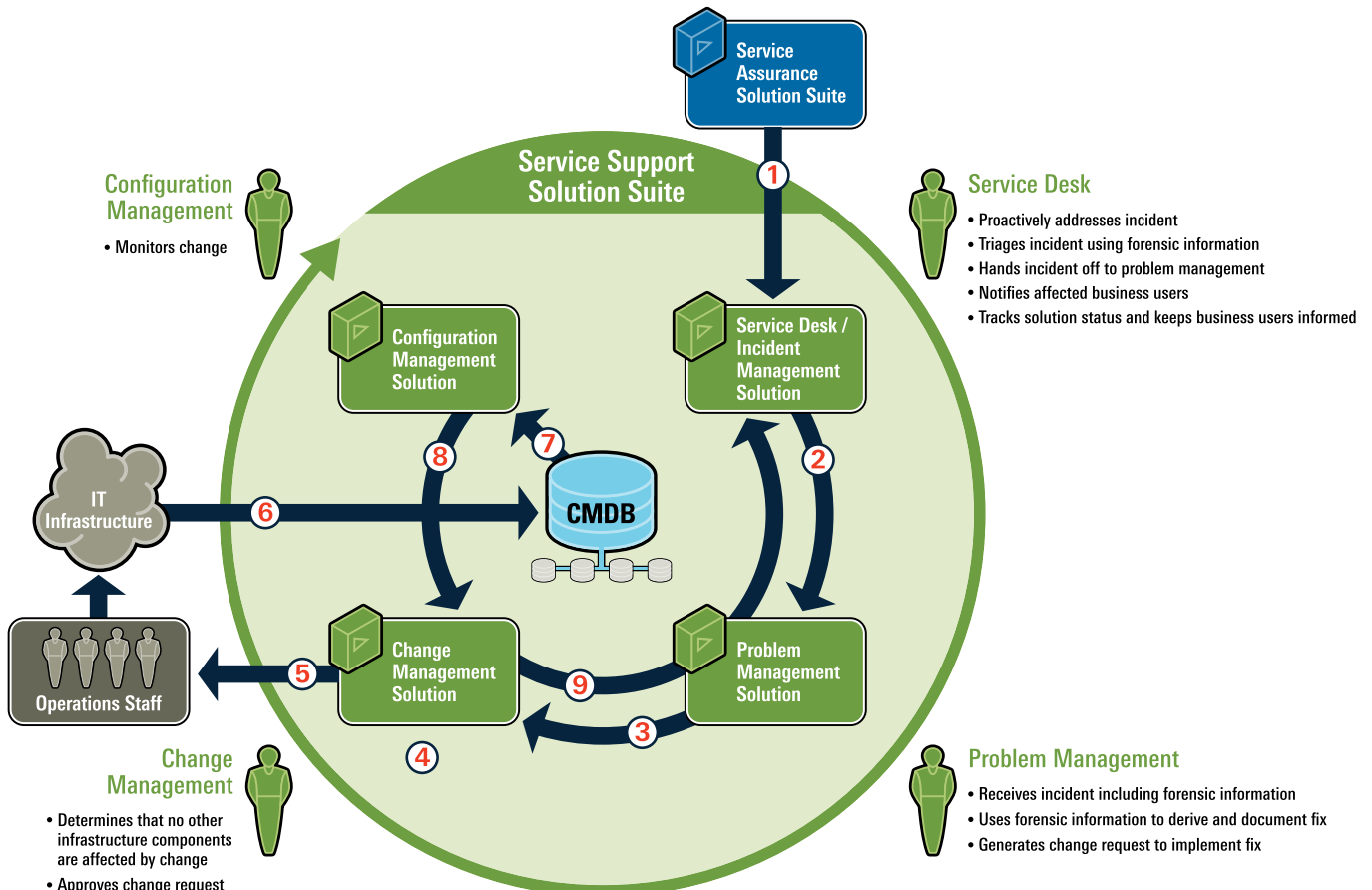


Figure 1. Putting it all together

## Reaping the Benefits

Once you have transitioned to a holistic, integrated approach to service support and deployed the technological foundation on which to implement the approach, you can achieve significant benefits.

### Achieve Closer Alignment with the Business

With a unified approach to service support, you gain a clear understanding of the services IT provides and their infrastructure dependencies. As a result, you will be able to provide coordinated, business-relevant responses to line-of-business requests and issues by directing the work of disparate IT specialists toward collaboration on business service delivery and support.

You will also be able to automate the prioritization of events and incidents on the basis of business service impact. The service support staff can prioritize and align support activities and decisions with business service requirements through an integrated CMDB that embeds a consistent understanding of interdependencies among business services and infrastructure components.

### Drive Down Costs While Improving Service Support

Another benefit of this holistic approach is the ability to coordinate support activity and decisions across specialized functions (as recommended by ITIL) with a unified ITIL-based process model. This model integrates workflows, data, and tasks across incident, problem, change, configuration, service request, service level, and asset management. In addition, you will be able to automate standardized processes, policies, and routine tasks, and to enable customer self-service.

This approach provides more efficient, strategic use of the support staff through better prioritization, process automation, and user self-service. Call volume and unplanned downtime will be reduced through proactive incident and problem management. You can resolve problems before they affect the users, and audit trails will be automatically generated, which reduces the cost of regulatory audits.

### Increase Business Transparency and Visibility

This big-picture approach to service support enables you to set service level goals on the basis of metrics that are linked with business objectives, and you will have a wealth of meaningful business service metrics and key performance indicators that span functional areas. You can leverage these metrics and key performance indicators to measure the value of service management and continually improve processes. As a result, you can communicate process improvement and value by using metrics and KPIs that business managers understand.

## Conclusion

When you think about service support, look at the big picture. That perspective requires integrating processes within and across service support functions. It requires increasing automation to eliminate manual tasks, streamline processes that span multiple functional groups, and enable users to serve themselves for many of their needs. This approach involves providing all service support functions with a comprehensive, consistent, and service-aware view of the IT environment.

To enable these capabilities, you must create an underlying foundation of tightly integrated service support solutions that share a single data store. The fastest and surest way to create such a foundation is with an integrated suite of service support solutions that have been developed together on a single architecture. The solutions should share a single, well-architected CMDB and all run on the same platform.

By looking at the big picture, you will not only drive down costs but also increase the business value of the service support organization. Moreover, you will be able to communicate that increased value to your business users.

To learn more about BMC solutions for IT service support, visit [www.bmc.com/bsm](http://www.bmc.com/bsm).



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