



## Understanding ITIL® Service Portfolio Management and the Service Catalog

*An approach for implementing effective service lifecycle management*

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## Executive Summary

Imagine trying to run a manufacturing business without a comprehensive, detailed view of the products provided by your company. It would be difficult to know all the products currently planned, in development, or available to customers. You wouldn't know the recurring or nonrecurring product costs, the prices, or the sources of products and component assemblies. How could you even determine the support resources required for each product or the product's warranty options?

Manufacturing firms learned long ago about the importance of maintaining comprehensive and accurate documentation on their product lines. Such information provides the foundation for informed decision making.

IT executives and their teams face a similar need to have a comprehensive and accurate view of IT services. Without this view, it's difficult, if not impossible, to run IT as a business. To be successful, take a lesson from manufacturing firms and create comprehensive and accurate documentation of your "products," including planned and existing services. The result is a service catalog that includes all relevant details about each service, including which service level agreements (SLAs) are associated with it, who is able to request it, how much it costs, and how to fulfill it.

You can leverage this information to gain full control of your service portfolio through effective service portfolio management. This approach helps you focus on your priorities to improve the services that support the business. It allows for the most efficient use of IT resources, which reduces costs and helps increase business agility and user satisfaction. Ultimately, service portfolio management sets up a process for the business to generate greater value.

This paper describes the IT Infrastructure Library® (ITIL®) Version 3 (V3) approach to service portfolio management. It examines the various components of the service portfolio, such as the service catalog. In addition, it discusses technologies available to develop and manage the service portfolio and to leverage the information contained in the catalog.

## Service Portfolio Management According to ITIL

ITIL stresses the importance of effectively managing the entire lifecycle of every service — from request to retirement. This requires a disciplined approach to the following:

- > Performing a strategic assessment of the benefits and potential value generation of the IT services
- > Evaluating requests for new services or for enhancements to current services
- > Planning and developing new and enhanced services for requests that have been approved
- > Deploying new and enhanced services into operation with minimal risk
- > Effectively managing and supporting operational services
- > Continually evaluating services and searching for areas of improvement
- > Retiring services that no longer have business value

Many IT organizations are already addressing the management of deployed services by using available service management tools and solutions. These tools enable IT to maintain service delivery at agreed-upon levels and provide effective support. Solutions are also available that enable IT to understand the relationships of the services to the underlying technology components that support them, as well as the business priorities of the services.

### Service Lifecycle Management

IT organizations are looking at ways to gain better control of services by addressing the management of the full service lifecycle.

ITIL V3 provides an approach for implementing effective service lifecycle management — Service Portfolio Management. As defined in Section 5.4 of the ITIL V3 *Service Strategy* book<sup>1</sup> and illustrated in Figure 1, service portfolio management consists of four major steps:

- > **Define.** Collect information and inventories of existing services. Establish the requirements for the requested service, and establish the business case for implementing the service.
- > **Analyze.** Review the long-term business goals, and determine what services are required to meet those goals. Then analyze the requested service for financial viability, operational capability, and technical feasibility to determine how the organization is going to get there. (You may decide to obtain the service from an outsourcer rather than develop it internally.)

- > **Approve.** Make a decision to retain, replace, renew, or retire the services.
- > **Charter.** Communicate action items to the organization to implement approved service, and allocate budget and resources.

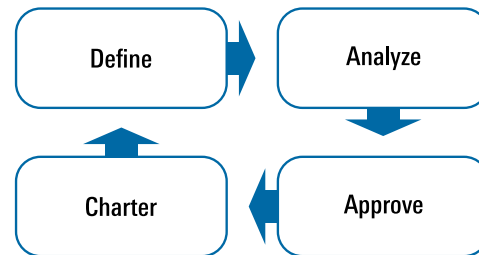


Figure 1. Service Portfolio Management

The *define*, *analyze*, and *approve* steps are described in the ITIL V3 *Service Strategy* book. The *charter* step is discussed in the ITIL V3 *Service Design* book.

### Business Service Management

The service portfolio management process requires continual re-evaluation and refreshing of services to adapt to changing business conditions. This can be accomplished through more rigorous planning and analysis based on comprehensive business information, such as leveraging top-down Business Service Management (BSM) analysis. BSM is an approach for managing IT from the perspective of the business. By following this approach, you can make better decisions about which services to develop, deploy, and retain. The process helps you make more effective decisions based on business factors — such as cost and expected value to the business — as well as on technical feasibility. With a view of your service portfolio, you can readily identify other services that provide the same or similar functions as a requested service to avoid duplicating services.

Effective service portfolio management helps you make better-informed, make-or-buy decisions, such as whether to outsource. You can determine the actions to take related to pricing services because you'll have accurate cost information. This approach also helps you determine which services to run as usual and which to transform into new services as determined by business needs and your ability to expand your offerings. Finally, it lets you retire a service that does not meet minimum technical and functional objectives. As a result, you'll improve your service offering by focusing on services that deliver the most value to the business.

In a mature IT organization, the most complex task of an IT executive is to integrate IT goals and objectives with overall business goals and value drivers. To organize the activities of IT around the business, IT needs to find a mechanism to link IT processes to business processes. This is a difficult task since IT and the business typically speak a different language and have goals and objectives that are not always directly connected. The best way to focus communication is for IT to answer the question, "What is the desired outcome for the business?"

The IT organization needs to manage IT as a service, rather than as individual technology components. Managing services is a lot more complex, and it requires that many individual technology components work together to deliver the desired business outcome.

A BSM approach focuses on linking service assets to higher-level business services. This approach enables IT to make business sense of individual technology components. These metrics and the ultimate business goals need to be documented and carried forward as part of service portfolio management.

## The Service Portfolio as a Strategic Asset

The service portfolio defined by ITIL V3 provides the data foundation for service portfolio management. The most important step in portfolio management involves strategic analysis. Look at the market space and your customers to analyze which areas will provide the most value to your business. The analysis involves considering your own capabilities and resources, as well as those of suppliers, to help you determine whether to run the business as usual or to grow it. In some cases, a unique opportunity presents itself in the market, and you must transform the service to create a new opportunity for the business.

All IT organizations depend on vendors for applications, services, and operational capabilities. Those vendors that provide a strategic service should be included in the strategic analysis. Service portfolio management has a critical dependency on the supplier management process to ensure control over cost and resources. The ultimate goal is to maximize value and keep control of your vendor portfolio.

## Service Portfolio Details

For each service, ITIL defines the attributes that should be maintained in the service portfolio, such as service description, business case, value proposition, priority, risks, offerings, packaging, costs, and pricing. These are evaluated throughout the lifecycle of the service project, from strategic analysis of a new service until the service is retired.

Each one of these attributes should also be part of the governance requirements. Therefore, keeping track of them as part of service portfolio management allows strict control over the projects and enables corporate audit processes required for risk assessment and audit compliance checks.

The service portfolio maintains three categories of services, defined by lifecycle phase:

- > **Service Pipeline.** Services that are planned or in development but not yet available to service consumers
- > **Service Catalog.** Services that are currently released and deployed or ready for deployment
- > **Retired Services.** Services that are no longer active

Figure 2 shows how services move through the categories of the service portfolio during their lifecycle.

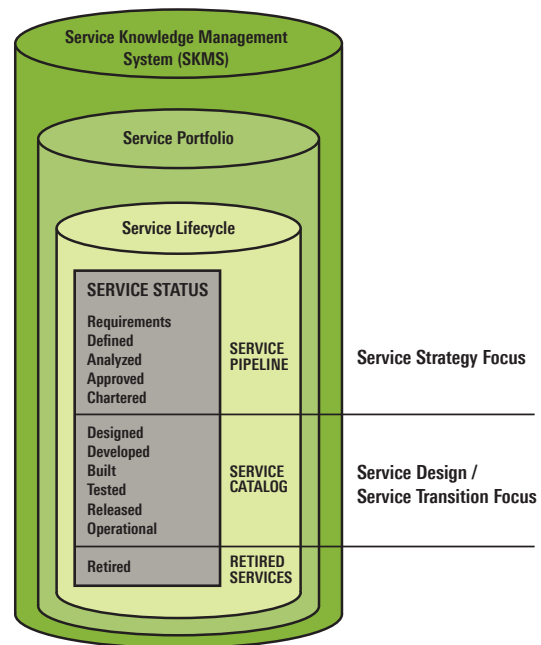


Figure 2. Service Lifecycle Categories

## Service Pipeline

The service pipeline represents the strategic outlook that you, the service provider, should take. Services begin their lifecycle in the service pipeline, starting with the strategic assessment of the marketplace and/or customers to be served. The pipeline includes the services that have been requested and are currently being evaluated. Here, you identify the requirements of the requested services. You then define and analyze the services based on a number of factors, including cost, risk, and expected business value. Based on the analysis, you either approve or reject requested services. Approved services proceed from the service pipeline to the service catalog. Service pipeline processes are defined in the ITIL V3 *Service Strategy* book.

## Service Catalog

The service catalog is the subset of the service portfolio that is visible to customers. The service catalog includes all services that have been approved and are either in development or currently deployed. Services include outsourced, co-sourced, and managed services. ITIL V3 defines several attributes to be maintained by the service catalog for each service, such as the following:

- > Service description
- > Policies
- > SLAs
- > Ordering and request procedures
- > Support terms and conditions
- > Pricing and chargeback

Here, you assess the feasibility of the services that come into the service catalog from the service pipeline, and either charter or reject them. Chartered services move to the design and development phases. Developed services are then built, tested, released, and deployed. At this point, services become operational, and you engage resources to support them.

The service catalog is used to develop requestable services that customers can purchase and consume. A mature service catalog is a very powerful tool for decision making. By analyzing the demand and fulfillment capabilities a service provides, a service portfolio management approach can assist you in making decisions to expand a service or the marketplace to serve to meet future demands.

## Retired Services

It is necessary to review the service portfolio periodically to determine whether any services should be retired. Services targeted for retirement may include those that are no longer needed by the business, those that have been superseded by other services, and those that are no longer cost-effective. Retire these services and identify them as “retired” in the service portfolio.

## A Closer Look at the Service Catalog

Maintaining a documented portfolio of services is only part of the story. You also need to communicate this information to the organization, and that’s where a service catalog fits in.

### Structure

As described in section 4.1 of the ITIL V3 *Service Design* book<sup>2</sup> and illustrated in Figure 3, the service catalog has two aspects:

- > **Business Service Catalog** provides the service consumer view. It contains details of the services available to consumers and shows the relationships of the services to business units and business processes.
- > **Technical Service Catalog** underpins the business service catalog and provides the IT view. It shows the makeup of the services, including the relationships of the services to the enterprise infrastructure elements that support them.

The two aspects of the service catalog have parallels in manufacturing firms. The business service catalog is analogous to the product catalog. The technical service catalog

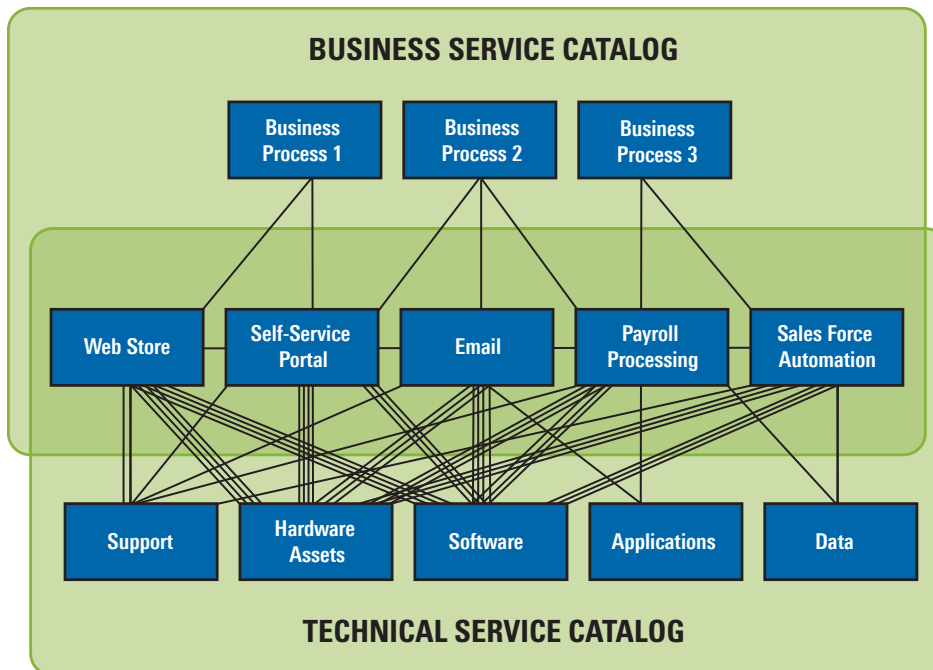


Figure 3. Service Catalog (Source: ITIL V3, *Service Design*).

is analogous to the manufacturing product assembly documents that show the assemblies and subassemblies that make up each product. Likewise, the technical service catalog gives IT an understanding of the makeup of services and enables IT to reuse services in different applications.

Both the business service catalog and the technical service catalog are essential to effective service lifecycle management as defined by the service. The business service catalog communicates essential information to users. The technical service catalog communicates essential information to the IT staff and shows outsourcer contributions.

### The Role of the Configuration Management System and Configuration Management Database

The configuration management system (CMS), introduced in ITIL V3, provides a strong foundation for the service catalog. The CMS is an ecosystem that feeds, manages, analyzes, and presents the information contained in the configuration management database (CMDB), another fundamental component of ITIL. Although the CMDB is depicted in the ITIL books as merely a core component of the CMS, a well-architected, federated CMDB implements much of the functionality of the CMS.

The CMDB maintains data on all IT resources, including infrastructure elements and services, as configuration items (CIs). It provides access to detailed data on each CI

and maintains information about the relationships of the CIs to each other. As such, the CMDB provides the informational foundation for both the business service catalog and the technical service catalog. By accessing the CMDB through the CMS, you can extract a view of the services currently available to customers. You can view the enterprise infrastructure, including all services and their relationships to the underlying enterprise infrastructure components.

### Enabling Service-Oriented Architecture Applications

Service-Oriented Architecture (SOA) applications are built by combining services in a hierarchical fashion to provide the required functionality. Included services can consume other services and be sourced both internally and externally. SOA permits the reuse of services in multiple applications. Reuse reduces the cost of service development and enhances business agility because it enables organizations to develop needed applications faster.

Application developers who build SOA applications need to know all the services that are available for inclusion in SOA applications, as well as information about those services, such as the following:

- > Strategic assessment of overall business goals
- > Service description, including the marketplace and customers served
- > Service makeup (supporting infrastructure components and services)

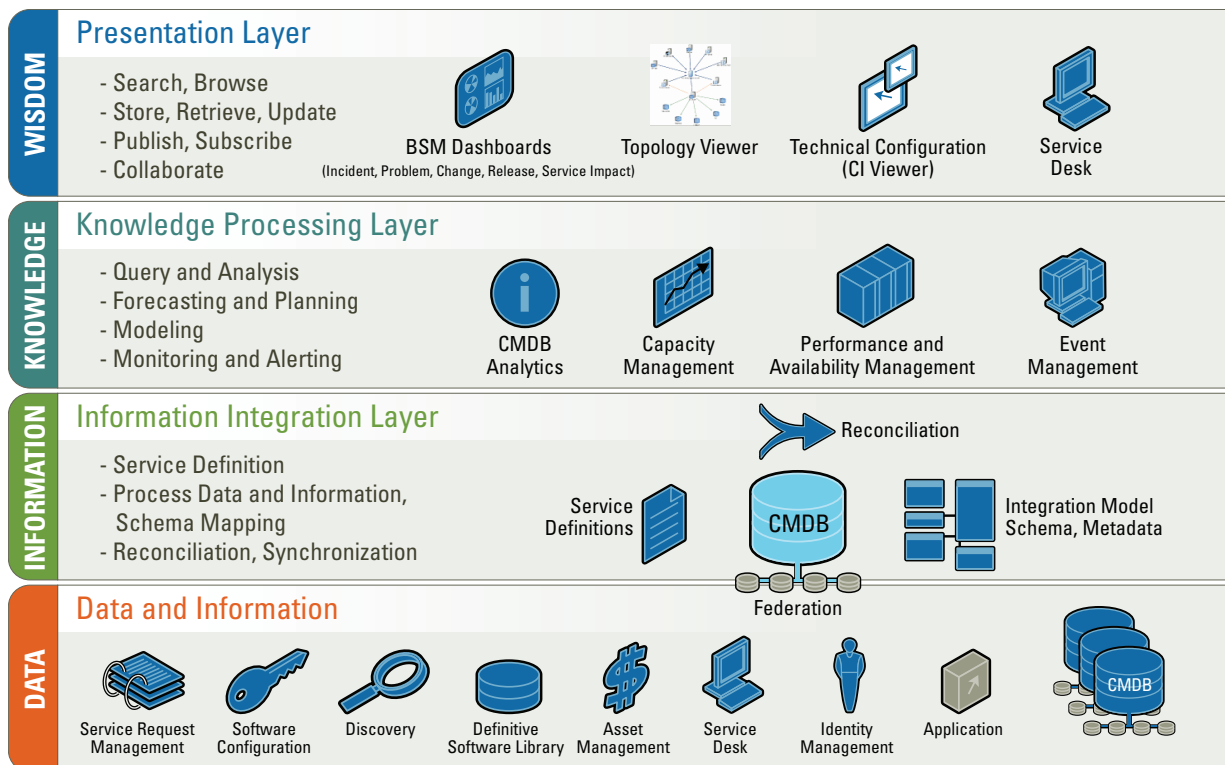


Figure 4. Sample Configuration Management Database (CMS)

- > Source (insourced or outsourced)
- > Access method and security requirements
- > Price for the service
- > Warranties and service levels

The service catalog provides the source for this information, which can be used to create a service directory through which SOA applications can link automatically to the services they require.

## Implementing and Leveraging the Service Portfolio

Solutions can facilitate the implementation and management of the service portfolio. For example, some include an automatic discovery capability that initially populates the CMDB and keeps it updated with changes. This ensures that your service catalog is always providing up-to-date information about available services. Solutions can be used to implement a business service catalog as well as a technical service catalog and can provide tools to manage them.

### Gaining Control of Development Projects

Project portfolio management solutions leverage information in the service portfolio to permit more effective planning and management of service development projects. They can help you in a number of important areas, including the following:

- > Project portfolio business value and risk analysis
- > Project portfolio prioritization
- > Project management with customizable processes and workflow
- > Project financials management
- > Program management

These solutions give you increased visibility into development projects across the enterprise. With this visibility, you can determine the most valuable projects to pursue, and you can execute those projects as efficiently as possible. In addition, you can make more accurate budget forecasts and build collaborative relationships with IT clients. As a result, you will achieve the optimum balance between market needs and your agility and ability to respond, and ultimately, can determine the Return on Investment (ROI) or Return on Value (ROV) of your projects.

### Automating Service Request Management

A major problem faced by many IT departments is that users do not know what services are available to them, let alone the details of those services, such as how to order them

and what they cost. Typically, users contact the service desk to obtain this information, adding to an already high service desk workload.

Once users determine the services they want, they also have a difficult time procuring them, often because they need to deal with several different sources to complete a single business service. For example, a manager onboarding a new employee may have to deal with several departments to provision the employee with a furnished office, including computer equipment. After requesting services, the manager has to track delivery status across the multiple departments involved.

Automated service request management systems can leverage the service catalog to provide automated service request management and fulfillment. The user consults an online service catalog to determine what services are available. The catalog contains all the information the user needs to know to order a service, such as service description, terms and conditions of use, performance and availability, warranties, price, and request procedure. A well-designed system displays only those services that the user is authorized to request, based on his or her role.

The user selects the service and enters the required information into the online service request form. The service request management system automatically triggers the required actions to process and fulfill the request. The system tracks the progress of each task and notifies the user when fulfillment has been successfully completed. In addition, the user can determine the status of a request at any time by consulting the system.

It's common knowledge that 20 percent of all the services provide 80 percent of all the value and work effort. By automating these high-intensity services, you can create a very strong ROI. Automated service request management makes it easy for users to request a service. In addition, it incorporates best practices to help IT process requests in a timely manner, reducing service desk workload and enforcing company policies and standards.

### Extending Beyond IT Services

Once you have put in place a strong IT service portfolio management capability, you can extend it beyond the management of IT services. This gives you the ability to apply service portfolio management principles and processes to other services that the enterprise provides and consumes, both internally and externally.



## Conclusion

You contribute business value to your organization through the services you provide. That's why you need to ensure that you are optimizing service delivery for maximum business impact. To do so, you need to implement effective service management, not only for deployed services, but across the entire service lifecycle, including service planning, development, deployment, and retirement.

Effective service lifecycle management requires that you have complete and accurate visibility into all services, across their entire lifecycles. ITIL V3 specifies the creation of a product portfolio and the implementation of service portfolio management as the foundation for effective service lifecycle management.

Through the service portfolio, both you and your users can gain greater visibility of services. Your users will be able to quickly find and acquire the services they need, and you will be able to make better-informed, business-based decisions regarding services. As a result, you'll provide greater business value to the organization.

For more information about ITIL and BMC solutions, visit [www.bmc.com/itil](http://www.bmc.com/itil).

## End Notes

- 1 ITIL V3 *Service Strategy*, Book 1, Section 5.4, published by TSO (The Stationery Office). Published for the Office of Government Commerce under license from the Controller of Her Majesty's Stationery Office, 2007.
- 2 ITIL V3 *Service Design*, Book 2, Section 4.1, Published by TSO (The Stationery Office). Published for the Office of Government Commerce under license from the Controller of Her Majesty's Stationery Office, 2007.



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