Service Portfolio Management: Manage IT For Business Value

FEBRUARY 2010

Dave Wilt & Pete Waterhouse

SERVICE MANAGEMENT STRATEGY

Table of Contents

Executive Summary

Challenge

No one should doubt that IT brings tremendous value to the business. Yet years of acquiring and managing IT from a technical perspective has made it difficult to discern which investments and resources are adding value commensurate with their costs. The pressure to find sustainable methods of gaining transparency into IT's business value has never been greater, thanks to cloud computing alternatives to traditional in-house IT coupled with economic pressure and a level of scrutiny over IT costs that many believe has become "the new normal."Any scalable, practical approach to managing IT for business value must overcome obstacles such as unmanaged and fragmented business demand, little transparency to the relationship between IT costs and business benefit, and a mismatch between IT and business contexts that impedes a common view of business value.

Opportunity

Service Portfolio Management (SPM) is a strategy for demonstrably improving the business value of IT. With SPM, IT investments and resources are translated into things the business cares about – services. By using integrated service and portfolio management solutions to support a Service Portfolio Management strategy, IT and the business can collaborate on how service function, quality, cost and business benefit should be balanced to maximize business value. Then IT can better guide its strategic investments and operational resource allocation throughout the service lifecycle. Over time, collecting information on key service value dimensions — cost, function, quality and business benefit — empowers a fact-based investigation into optimizing the service portfolio itself, such as where to invest, divest or even retire services. Using services as a common context between IT and the business, IT can manage its demand, know its costs, and show its value.

Benefits

With an SPM strategy you can continuously right-size IT investments and resources to meet business requirements for service quality, cost, function and benefit. SPM provides common interfaces and metrics for fact-based collaboration with your business customers to:

- Reduce costs by standardizing, consolidating and retiring services
- Communicate business value through service contracts, a service catalog, cost transparency, and portfolio analysis
- Improve business satisfaction by managing and meeting service expectations
- Reduce waste with integrated service demand and delivery
- Continuously improve service quality, cost and function

SECTION 1:

Challenge — Seeing Through Silos to Manage Value

Beyond Alignment

The 2008-2009 recession and cloud alternatives to in-house IT are creating a "new normal" where IT executives are expected to continually demonstrate the potential and realized business value of IT investments, initiatives and operations. Some industry approaches have long promised "IT-business alignment" but tend to focus mainly on keeping the right lights on better, faster and cheaper — a good thing but hardly a demonstration of business value.

Unlike bottoms-up approaches that start by mapping infrastructure to applications to better manage availability, managing IT for business value requires a top-down approach starting with an understanding of what business constituencies need from IT and why. A structural understanding of business requirements is needed to connect both technical and organizational dots into three essential aspects of managing for business value:

MANAGE YOUR DEMAND. Whatever the economic cycle, the demands placed on IT by the business continue to increase and are constantly changing. Managing demand is difficult when there are multiple "front doors" to IT — a mash-up of formal and informal ways to request resources through projects (strategic demand), break-fix and changes (operational demand), and everyday requests like granting application access (tactical demand). "Squeaky wheel" and "first-in-first-out" approaches often decide which demand is met and when. IT finds it hard to say no, understand why, or accurately gauge the cost and time needed to deliver. Today's poster child project is tomorrow's operational overhead.

"Lacking an understanding of service costs, IT is left to allocate its costs as a single, large charge which often provokes two questions from those paying the bill: Why does IT cost so much, and what value am I getting from this?"

"IT Chargeback Adoption: The Haves and Have Nots", Forrester Research, Inc., July 2009

Value-aligned IT organizations not only manage their response to demand efficiently but also understand and influence demand through collaborative decisions with customers. It is in this initial demand stage, before a new IT capability is built or delivered, where the crucial question of "what should the business value be" is best answered. IT and the business must make fact-based decisions about where to invest and more purposefully allocate finite resources.

KNOW YOUR COSTS. Most IT organizations find it difficult to gain cost visibility beyond departments or basic technology categories. Even fewer are able to provide the business what it really needs: transparency into how costs relate to things the business values.

Value-driven organizations speak a common business language. They have not only richer insight into costs, but also how they relate to services the business values. They show their business counterparts what they are getting for their money, and how investments are performing.

SHOW YOUR VALUE. Reporting IT effectiveness in terms of operational efficiency or project completion rates is a good thing but does not show the value of what IT brings to the business. How does the business understand the value of the technologies you are now operating more efficiently, or the projects you delivered? How can you answer whether a new business demand should be met in-house, outsourced, or from the cloud? With all the time and energy spent operating more efficiently, could you reduce costs more — and free up resources for greater value – if there were some technologies you could stop operating all together?

Value-aligned organizations operate IT according to business outcomes and objectives. They use real-world operational data to continuously tune and report what IT provides from a value perspective.

The Great Contextual Divide

Much ink has been spilled on how IT and the business speak different languages, but differences in language are just a symptom – a mismatch of contexts is the root cause of misalignment. You could slow down and explain to the business in plain, simple terms that "the accounting system never went down last month" and the business would indeed understand you, but would they care? Even if system availability had been bad enough last quarter to warrant business scrutiny this quarter, improving availability still doesn't answer the question, "What value is IT providing me with the accounting system?". Availability is expected, and delivering availability alone doesn't speak to the business customer's context.

Even with business collaboration IT often struggles to demonstrate its value in business terms. This has partly been due to the practice of managing IT from a bottoms-up technical perspective. Over time, the culture of acquiring and operating in this way has led to islands of technology management, each with its own specialists, but with little coordination around a common context. And, while IT has become more expert and adept in managing networks, servers and so forth, this inward focus has often led to IT providing the wrong sets of answers to the value-based questions asked by the business. It's not that summarizing metrics like last month's network availability or project completion rates have no value, but they have limited business context and are pretty much meaningless to most business stakeholders.

Despite heroic efforts (often in the form of IT-business meetings, manual reports and a complex Web of spreadsheets), this contextual divide continues to plague IT. And unless action is taken to bridge the divide and manage IT for business value, IT runs the risk of being perceived as a black-box cost center; one in which endless streams of investment flow and no tangible value is understood. This of course is problematic during any economic cycle, but when IT is placed under a stricter cost lens, the tendency will be to cut costs "across the board" (or "peanut-buttering" – spread evenly) without discriminating waste from value, fat from muscle.

SECTION 2: Manage IT For Business Value

Service Portfolio Management

From its inception, the ITIL framework has made services the cornerstone of IT management best practice, with the notion of customer value in the very definition of a service in ITIL v3: "a means of delivering value to customers by facilitating outcomes customers want to achieve without the ownership of specific costs and risks."

Services create a bridge between IT and the business by providing a common context for linking IT to business value. Line-of-business and C-level executives can understand how business services like "Customer Relationship Management" and "Order Fulfillment" support business objectives like increasing customer retention or reducing costly shipping errors. IT can understand how projects, applications, infrastructure, cloud services, and staff activity support services. IT and its business customers can collaborate to ensure that the function, cost and quality of services are right-sized from inception to retirement to drive business objectives.

Introduced in 2007, ITIL v3 introduced Service Portfolio Management (SPM) as a "dynamic method for governing investments in service management across the enterprise and managing them for value." ITIL lays out the concept of SPM, but leaves the details of how to apply the concept to the industry at large.

"Implementing service portfolio management helps CIOs transform IT assets and their associated costs into business services that they can price and link to business value. IT's position within the firm morphs from a cost center to a value-added service provider with transparency into its operations and spending..

"Service Portfolio Management Links IT Capabilities to Business Value," Forrester Research, Inc., Nov. 2008

In the rest of this paper we will look at some of the ways in which SPM can be applied in the real world as a strategy for demonstrating and improving the business value of IT. In particular we will discuss how integrated service and portfolio management solutions can support a SPM strategy by continuously right-sizing IT investments and operational resources to meet business requirements for service quality, cost, function and benefit so you can:

MANAGE YOUR DEMAND with a unified process for balancing strategic, tactical and operational service demand against available budgets, staff and assets

KNOW YOUR COSTS with transparency into how your asset, staff and vendor costs relate to services that your customers value

SHOW YOUR VALUE with a single pane of glass demonstrating how your services align to business objectives, cost and quality

To better understand SPM we should first be clearer on what we mean by "value", "service" and "service portfolio."

What is Business Value?

One of the challenges in managing IT for business value is defining what business value really means. Entire books have been written and methodologies developed to measure the business value of IT, but in this paper we'll take a relatively simple and pragmatic view as a starting point.

The value of any service comes from understanding how its function, cost and quality come together to deliver a benefit to those that consume it.

First, we need to understand the difference between "value" and "benefit." Let's say a business customer wants IT to help reduce fulfillment errors in a logistics process. IT delivers a new and improved "fulfillment service" in Q1 and by Q4 errors are down 50%. But is this all you need to know the value of the fulfillment service? What if the total business benefit of that 50% error reduction is $200,000 per year but the cost of designing, delivering, and operating the service is $400,000 per year? This 50% error reduction is a business benefit of the service, and is a very good start at defining value (many IT executives would love to have this kind of data.) Clearly, cost is a required dimension for understanding service value.

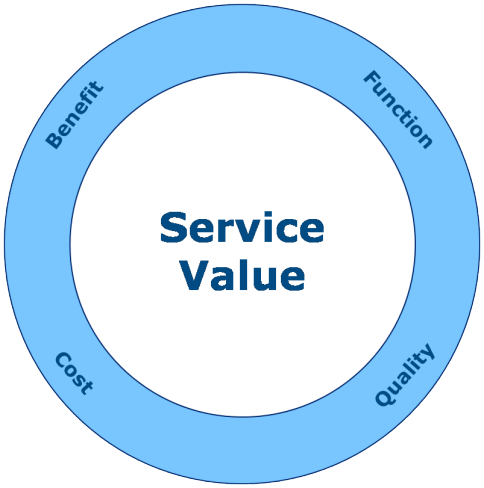
How do we know that the service from IT was responsible for the 50% reduction in errors? Just knowing there's a service called "fulfillment service" and proclaiming it responsible for the 50% error reduction won't be terribly convincing to the business. We need to describe the function of the service, not only in "business language" but in business context: i.e. which service function(s) target fulfillment error reductions and how?

If we can deliver a service with the functionality needed to reduce error rates 50%, and do so at a cost that is less than the benefit of the 50% error reduction, have we then established what we need to manage for business value? Not quite. What if the service works brilliantly except during peak shipping times where it slows down or becomes unavailable? What if it is unable to recover from a disaster? This is why we add service quality to the value mix. Service quality cuts both ways — you can under-engineer or over-engineer a service. If the business does not see or understand the tradeoffs between different quality options on the desired benefit, they may be tempted to ask for "Cadillac Services" with 24x365 uptime and full redundancy every time.

Ultimately, value is about balance and tradeoffs, between cost and quality, function and quality, function and cost, cost and benefit. They all interplay, and striking the right balance before the service is delivered — then monitoring and perhaps adjusting that balance over the lifecycle of the service — is a large part of what SPM is about.

FIGURE 1

A goal of SPM is to continuously balance investments and operational resources across four dimensions of service value: benefit, function, cost and quality.



Service Portfolio and Service Types

As defined by ITIL, the service portfolio is comprised of three groups of services: the service pipeline (services or service enhancements in development), service catalog (services that are in production and available for consumption) and retired services. Services can be further broken down by type. Although there are healthy debates about how to categorize services, in our goal to be pragmatic we are going to stipulate some basic descriptions for three types:

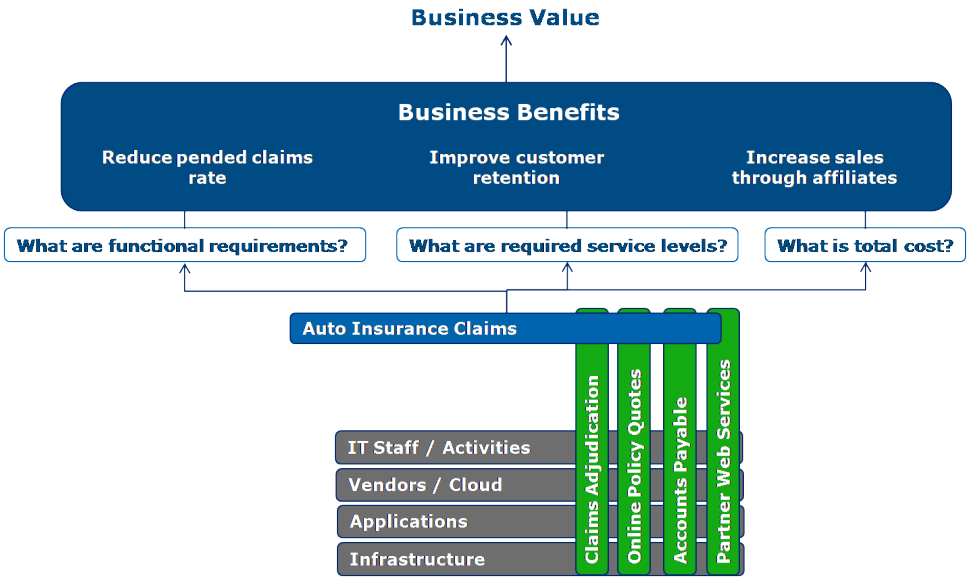
BUSINESS SERVICES: a service the business recognizes as providing value in support of a business process or function. This is the highest level of service in the service hierarchy and where SPM cost and quality metrics can provide the most near-term value since its functions most directly relates to business value. The business service level is where it is most important to describe and measure cost and quality. Business services are represented in a "Business Service Catalog" and depict the (often many-to-many) relationship between business services and business processes. Business services are "business-facing" and typically most relevant to business executives. An example for an insurance company might be "Auto Insurance Claims Service."

TECHNICAL SERVICES (ALSO "IT SERVICES"): an IT-facing view of services that underpin business services. IT services are contained in the Technical Service Catalog with descriptions of the IT components and activities required to deliver a service. Costing and quality (e.g. operational level agreements) done at the technical service level can be valuable to derive or support the cost and quality of supported business services — and to help IT become more efficient – but most business customers will not be exposed to costing or quality at this level. A technical service example for the same insurance company might be "Partner Web Services" which, in turn, underpins the "Auto Insurance Claims Service."

REQUESTS (ALSO "REQUESTABLE SERVICES"): whereas business and technical services describe IT's capabilities, requests are transactional in nature, describing "what you can ask IT to do", usually for the delivery of some aspect of a business or technical service. Both business end users (employees) and business managers can see requestable service such as "order a laptop" or "provide password to access a file share" whereas internal IT-facing technical requests might include "backup database" or "provision virtual machine."

FIGURE 2

The business value of a service is described by the business benefits it delivers coupled with the function, quality and cost of providing the service. A business service (like Auto Insurance Claims) is underpinned by technical services (like "Partner Web Services"). Technical service descriptions include how IT components and activities support that service.



All three types of services are related and should interact with one another. For example, IT needs to manage OLAs, coordinate delivery and understand the components of technical services in order to design, transition and operate business services. Requests can be used to understand business consumption of business services, which as we'll see shortly is important for both cost transparency and portfolio analysis.

Any services can support each other within their own service type. For example, several business services like customer relationship management, logistics and accounts payable might work together to support a broader "order-to-cash" business service. Technical services like "server provisioning" and "Oracle database backup" may both underpin the "Oracle database" technical service. Granularity and complexity should be minimized to realize value quickly, with principles in mind for how and when new services will be added within the hierarchy over time.

This interplay between different service types is why CA Service Catalog was designed to handle all types of services and their relationships, using different permissions and views to present different "catalogs" (business, technical, request) to different constituencies (business executives, IT, business end users). Where you start in your implementation of a service catalog will depend on your business goals. For quick wins in IT efficiency and end-user satisfaction you might start with requests, while the goal of business value management favors a top-down approach starting with business services.

A Pragmatic Scope for SPM

SPM isn't an isolated activity. It happens in the context of several IT processes and activities that, when done through a service value lens, support an SPM strategy. Yet we should avoid the slippery slope of saying that everything IT does should be done to "manage services for value throughout their lifecycle", thus almost anything can be "SPM." In order to be effective with SPM we need some practical boundaries and guidance on where to focus our energies by focusing on what processes have the most impact on service value. For example:

- Demand Management is the gatekeeper that determines the tradeoffs between business benefit, cost, and required quality and function before a service is approved to built (internally) or acquired (e.g. via cloud services).
- Service Catalog is the source of truth for describing our production services, presenting them in the right context to different constituencies, and tracking consumption through requests.
- Financial Management provides projected costs and ultimately the actual costs of providing a service.
- Asset Management is a critical component of Financial Management and also helps identify the components that support a service as part of Asset and Configuration Management.
- A consolidated Service Desk function that manages incident, problem, change and configuration management processes is a key source of operational demand ("break-fix") and the keeper of desired service configuration. As the incident and problem source of truth, the Service Desk is also an important input to service quality and can be used to better gauge the cost of supporting a service
- Service Level Management helps provide quality targets and options into Demand Management, and then keeps the rest of IT on track to deliver on this business value dimension in production.

Note that we are not saying the SPM is the "superset" of all functions of all the processes above – rather it is the intersection of certain functions of these processes that most directly supports SPM.

SECTION 3: Building an SPM Roadmap

Process View: Key Service Lifecycle Touchpoints

How do you eat an elephant? One bite at a time. Even within the pragmatic scope we have defined, SPM isn't a strategy to be fully implemented with one single initiative or software solution. Yet it is possible to get value from each step of the SPM journey if we break it down into implementable pieces, always with one eye on how these pieces will ultimately fit together to manage business value more completely.

There are four key steps across the service lifecycle that can most impact service value. Here are a few highlights from each:

1. Manage Demand

- Aggregate and integrate demand, reducing the many "front doors" into IT down to a unified process.
- Build business cases to determine the value balance across benefit, function, quality and cost dimensions.
- Make value-based decisions on which new services and enhancements to approve for design and build activity, factoring in resource and risk constraints.

2. Define Services

- Translate IT's offerings into business, technical and requestable services that speak to the customer's context and language.
- Collaborate on written service level contracts with each customer that include metrics for service quality and cost that are meaningful to the customer.
- Expose different service catalog views to different constituents to enable self-service requests and subscriptions that trigger automated delivery. Include published pricing to help shape demand before resources are consumed.

3. Coordinate Delivery

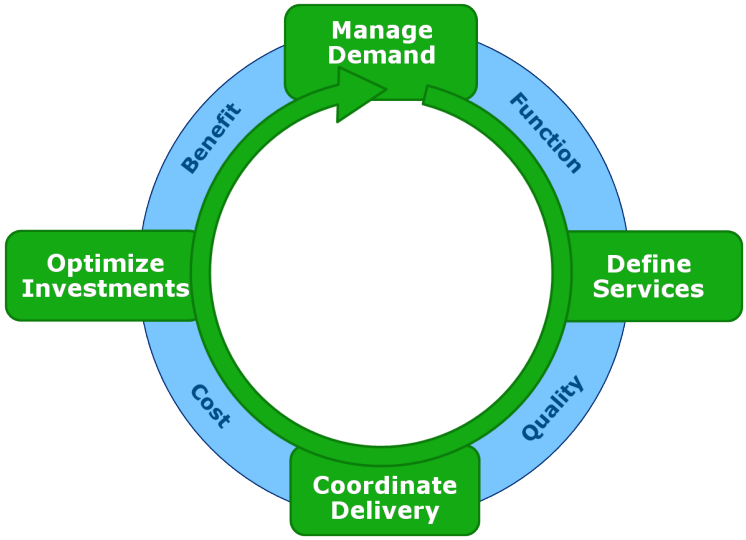
- Monitor and regularly report on service contract performance by correlating operational quality data from multiple sources to SLAs (e.g., incident and problems from service desk, application performance, infrastructure management, fulfillment times from service catalog).
- Allocate top-down IT costs to services per consumption metrics from catalog requests and subscriptions together with other relevant metrics (e.g. disk usage).
- Use showbacks (informational only) or formal chargebacks to provide transparency back to business customers on the cost of their services.

4. Optimize Investments

- Aggregate operation metrics on service quality, cost and consumption.
- Measure business benefit by alignment to business objective, surveys of business customers, or hard data on outcomes if available.
- Analyze data across the portfolio to see which services are delivering against value as intended and which aren't. Identify services to investigate further for possible consolidation, retirement, outsourcing or further investment.

FIGURE 3

SPM seeks to manage the balance of service value dimensions (benefit, function, cost and quality) throughout the service lifecycle. Key steps in the lifecycle afford particular influence over this value mix: Manage Demand, Define Services, Coordinate Delivery and Optimize Investments.

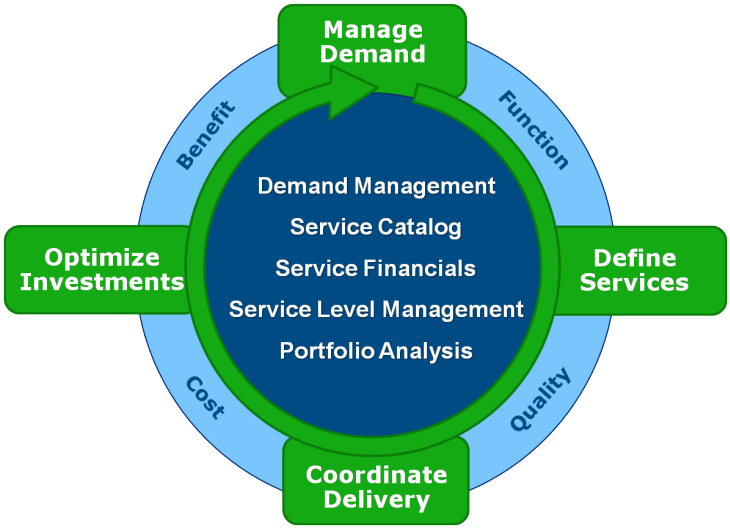


SPM Onramps

CA provides a pragmatic approach for realizing SPM value faster by breaking SPM down into more digestible parts with "onramps" — targeted software and services solutions that implement supporting SPM disciplines in phases, each with their own stand-alone value. With SPM onramps you can quickly address immediate pains around Demand Management, Service Catalog, Service Financials, Service Level Management and Service Portfolio Analysis while building greater SPM maturity, integration and value.

FIGURE 4

SPM continuously aligns your IT investments and resources to business requirements for service cost, quality, function and benefit. SPM onramps for Demand Management, Service Catalog, Service Financials, Service Level Management and Portfolio Analysis provide a pragmatic, incremental approach to implementing your SPM strategy.



Demand Management

CA provides a comprehensive solution for standardizing and integrating processes for managing all business demand. You can capture, evaluate and respond to strategic demand with CA Clarity Project and Portfolio Management, operational demand such as changes and break-fix with CA Service Desk Manager, and tactical demand such as provisioning access to applications with CA Service Catalog. Using CA Oblicore Service Level Management you can drive mutual, contracted agreements with customers for service quality and cost trade-offs — before the service is built and deployed.

CA Clarity PPM's industry-leading strategic demand management provides a platform for IT and the business to collaborate on fact-based investment decisions. Cost and ROI estimation tools help you build a business case for proposed services and enhancements while customizable alignment criteria score them for alignment with business objectives.

An aggregated view of strategic service demand is analysed against constraints such as budget and the availability and cost of staff and asset resources. This visual analysis helps you see which proposed services and enhancements should move forward and when, and guides the balance of function, cost and quality needed to get the most out of your IT investment.

As new service and enhancement proposals are approved they populate the service pipeline — the first part of the service portfolio.

Service Catalog

As services are ready for production they move from the service pipeline into the service catalog. CA Service Catalog provides you with tools to describe standardized services and packages and publish them via role-based Web views in your customers' language and context. Executive views provide descriptions and metrics for top-level business services such as "Customer Relationship Management" or "Order Management." End user views provide easy point-and-click self-service ordering and status for requests like "Provide Access to ERP Accounts Payable" or "Order iPhone." Out-of-the-box content for more than 100 common services helps you kickstart your service portfolio definition.

IT views include technical IT Services like "Virtual Server" or "Hot Backup" — and define how these services underpin other services. Integration between CA Service Catalog and CA CMDB provide catalog managers with visibility into the CMDB's understanding of service configuration to facilitate service fulfilment and costing. Going the other direction, IT operations staff can use CMDB to launch into service catalog to better understand the business view of the service including SLAs as well as description and pricing.

Demand signals such as business subscriptions and user requests trigger your IT supply chain for just-in-time lean delivery. Automated workflow orchestrates service approval and delivery, captures service consumption and measures fulfilment processes for continuous process improvement. Fulfilment can be automated end-to-end with integration to tools that provision identities, software, virtual machines, and more.

Service Financials

CA provides a comprehensive yet practical solution for both IT and its business customers to gain transparency into service cost and consumption. CA Service Catalog is natively integrated with robust Service Accounting. Service Accounting provides top-down cost allocation modeling from budget to service, so you can better understand your cost of providing services without the investment in a bottoms-up data warehouse approach. Set customer-facing pricing for different service packages and service level options, then automatically track the total value of each customer's service consumption. Cost and consumption reporting can be used internally to guide investment and operational resource alignment decisions, shared with the business as information-only "showbacks" to help business customers make cost-aware choices, or delivered as invoices for formal chargebacks.

CA Clarity PPM and CA IT Asset Management manage the costs of key service components. CA Clarity PPM provides tools for estimating the cost of a service before it is built and delivered, and can then provide visibility into the cost of staff activity throughout the service lifecycle. CA IT Asset Management provides visibility into the costs of hardware and software assets that support your services, including contractual terms and conditions such as software license, support and warranty provisions that can affect service access and pricing.

Service Level Management

CA Oblicore Service Level Management takes a unique top-down, business-focused approach to authoring and administering service level agreements. Using standardized, ITIL v3 libraries you can rapidly define business-oriented performance measurements for your service offerings. In addition, this information can be leveraged to front-end your company's supplier contracts, service level agreements and operational level agreements — and manage these SLAs throughout their lifecycle. You can then monitor the performance of services and SLAs alike in near real-time, by associating performance metrics with event data from multiple existing sources, whether CA or third party, IT operations or business systems.

While CA Oblicore Service Level Management can be up and running in a few weeks to define and monitor a few basic services, and it is also uniquely able to accommodate the complexity that is the reality in today's enterprise environment. This complexity includes outsourced and multi-sourced services (services that are provided in part or wholly by cloud or managed service providers), as well as many-to-many dependencies between service contracts, SLAs, service level objectives, operational level agreements, configuration items, and internal and external data sources. In addition to working with your existing data sources, CA also provides a full range of solutions that include monitoring and managing of service level objectives (SLOs) and operational level agreements (OLAs) across various domains, including application transactions, infrastructure, request fulfillment, incidents and changes.

Portfolio Analysis

SPM is a closed-loop process for continuous improvement of business value. This includes pulling back from day-to-day activity for a strategic look at the service portfolio as a whole. After services have been operating long enough to collect a 360-degree view of their cost, quality and benefit, portfolio analysis helps you and the business see where to reduce vs. increase investment to drive greater business value. CA Clarity PPM includes advanced analytics, what-if analysis and scenario planning at the service level, providing a single pane of glass for visualizing which services in your portfolio merit a closer look for combining, retiring, outsourcing or further investment.

SPM Guides Your Service Value Chain

SPM should not be an isolated analytical exercise. In order to drive the right value-based decisions your SPM processes should be continuously fed by real-world operational data on service quality, cost, and consumption. This may include performance and availability data from application and infrastructure management, incident and problem data from service desk, staff time from PPM, asset costs from IT Asset Management and service configuration from a federated CMDB or Configuration Management System.

To ensure your valued-based portfolio decisions are carried out faithfully throughout the service lifecycle, service-aware execution tools can dynamically allocate resources according to the business priorities set by SPM processes. This may include automating incident and change priorities in service desk, project task priorities in PPM, operational level agreements in application and infrastructure management, virtual server provisioning in datacenter automation, and access provisioning in identity management.

With CA's unique breadth of Lean IT management capabilities you can ensure SPM not only helps you do the right things, but also that you do them well, balancing supply and demand throughout the service value chain.

SECTION 4: Summary and Conclusions

Years of acquiring and managing IT from a problem-fix and techno-speak perspective put the technology function at odds with what business customers expect – demonstrable business value.

Business understands and relates to services, not technology piece-parts, so it makes perfect sense that by understanding the cost, quality, function and benefit of services within a portfolio, business decisions about where to invest, divest or even retire services become fact-driven.

A Service Portfolio Management strategy, backed by CA's industry leading solutions and comprehensive service offerings, can help you demonstrably improve the business value of IT by continuously aligning IT investments and operational resources to business objectives for service function, quality and cost.

Offering comprehensive solutions that also address immediate pain points, CA's approach to Service Portfolio Management helps you and your organization:

MANAGE YOUR DEMAND — with a unified process for balancing strategic, operational and tactical service demand against available budgets, staff and assets.

KNOW YOUR COST — with transparency into how asset, staff and vendor costs relate to services the business values.

SHOW YOUR VALUE — with a single pane of glass showing how your services align to business objectives, cost and quality.

SECTION 5:

About the Authors

Dave Wilt is Director of Product Marketing for CA with a focus on service management and a particular interest in Service Portfolio Management, Service Catalog, Configuration Management Database/CMDB and IT Asset Management. Dave's 20 years in technology include stints at HP, BMC, Ariba, Vitria, and a few long-forgotten start-ups. He is ITIL Foundation and IAITAM CSAM (Software Asset Management) certified.

Peter Waterhouse has been involved in the development, support and marketing of IT Management software products for more than 20 years. He has held a number of consulting, technical sales and marketing positions in areas such Network and Systems management, Application Management and IT Service Management. He writes regularly about business technology issues and is the author of many white papers and articles. He is currently an Advisor in Solutions Marketing for CA, Inc.

CA, one of the world's largest information technology (IT) management software companies, unifies and simplifies the management of enterprise-wide IT for greater business results. Our vision, tools and expertise help customers manage risk, improve service, manage costs and align their IT investments with their business needs.

1520_0210