**Pink Elephant Guide** 

# Defining IT Success through the Service Catalog

Troy DuMoulin Rodrigo Flores and Bill Fine



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# DEFINING IT SUCCESS THROUGH THE SERVICE CATALOG

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# Defining IT Success through the Service Catalog

A practical guide about the positioning, design and deployment of an actionable catalog of IT Services



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# Colophon

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# Preface

The subject of IT and business alignment is a popular one. While not to downplay this topic's importance, one needs to ask *why* it is so popular. Concerns about HR and business alignment, or finance and business alignment are not prominent. The very fact that IT and business alignment are relevant topics today tells us something about the level of maturity of our industry.

Most IT organizations around the world are at the very early stages of an evolution – transforming from technology-focused organizations to service-focused organizations. The challenge is how to convince both the 'techies' and the business customers that IT does not simply manage hardware and software.

As the evolution to a Service Delivery model continues, it is important to understand where the industry came from and how Technology Management differs in focus from Service Management. Over the last 20 years IT planning, strategy, recruitment, skills training, and reward and incentive programs focused on developing centers of technology excellence. Individuals were hired, and trained to hone their technology skills in order to optimize and reduce cost around the use of new technology innovation. However, for the most part education about the business perspective was largely ignored. Nowhere is this clearer than the fact that most computer science degrees have, until recently, been purely technology-focused with little or no focus on teaching general business principles.

The service mentality evolution starts with the awareness that a customer facing service cannot be understood as collections of like technology, segregated by domain, platform, or protocol. And that it is the rudimentary responsibility of IT to understand how any given IT component enables or disables a business process. Until this is known it is difficult to claim that IT is aligned to business goals.

The IT world has become more networked, the software stacks have acquired more layers of abstraction (application servers, database, web servers, business intelligence, etc), and devices have proliferated (mobility is going to double the number of devices per employee). As a result it is easy to lose the relationship between an IT Service and its business value. The IT Service does not live in a machine or a software package. It is distributed across hundreds of devices and software components.

While we are not futurists, we can safely predict this: there will be more data, more devices, more software, new stacks and new dependencies. As organizations become more networked and concepts like WIKIs, blogging and web 2.0 mashups are adopted, it will be harder and harder to figure out where an IT Service starts and ends and, consequently, more difficult to describe, measure, cost and govern these services.

The purpose of this book is to help the reader develop practices and disciplines for IT Service Design and Governance. IT Service Design, at its core, is the ability to communicate what IT

does in a manner that enables the business to demand and consume IT resources appropriately and responsibly, and in line with business priorities. IT Service Governance relates to the actual design and specification of a service and its structure with sufficient rigor that IT operations can build it, run it and manage it. Bringing IT Service Design and Governance together is, we believe, the next evolutionary step for IT.

# **About Pink Elephant**

Pink Elephant is the world leader in IT management best practices, offering solutions to public and private businesses globally, and many listed in the Fortune 500. The Company specializes in improving the quality of IT services through the application of recognized frameworks, including the Information Technology Infrastructure Library (ITIL). For more information, please visit www.pinkelephant.com.

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Technology commoditization is driving changes and new priorities for IT organizations. Moore's law<sup>1</sup>, open source and global sourcing have all made technology widely available, standardized and cheaper than ever. Business management is responding with an everincreasing willingness to outsource key IT functions and entire IT departments.

In this context, does IT matter? This is the question author Nicholas Carr asked in his book of the same title, and a sea change in attitude was unleashed on the shores of an unsuspecting IT organization. Carr's basic argument is that IT Services are becoming increasingly commoditized, and as such, provide little opportunity for competitive advantage to the business. If everyone has the same capability, then IT is not a differentiator, but rather a risk that needs to be managed and a cost that needs to be controlled. How much market differentiation is email delivering to your organization? The answer is none.

The result is a cost-dominated conversation between IT and the business, where IT is facing increasing pressure to account for and reduce cost wherever possible. The old axiom of 'doing more with less' has never had such an impact on IT operations and support as it does today. Thousands of IT Managers are being placed in a situation which compels them to defend their staffing levels against both internal and external threats.

To address this situation, IT Executives are being forced to gain a better understanding of the services they provide, and undertake an accurate cost-benefit analysis of why these services are better value than services being offered by managed service providers who promise fixed or known costs.

As is the case with any business, IT is asked to develop a catalog that defines the scope, characteristics and costs of available services and products, and allows for better management of the IT environment as a whole. The basic requirement to do all this is to have a clear

<sup>1</sup> Moore's Law refers to the concept of technology's growing complexity and functionality coupled with the ever shrinking size of the technology.

definition of the services the IT organization provides, the components and resources that make up the service, and the associated costs for these services.

The sad fact of the matter is that very few IT organizations have developed a Service Catalog that articulates what they do and what they offer at this level of detail. The opportunity, however, is that organizations embracing this challenge have the ability to become more than just a commodity supplier. The role of IT in the future, we believe, demands that both IT organizations and managed service providers evolve beyond technological competence and effective cost-management, to a role in which they enable the management of business risk and alignment of IT investments with business value. The cornerstone of this evolution is the IT Service Catalog.

# 1.1 Beyond Cost Center - managing business risk

While in recent years the primary focus of IT has been the cost-optimization of technology domains, applications and components, the growing interest in service management represents a revolution occurring within the IT industry. This revolution is fueled by a growing understanding that there is no real separation between technology and business process. Business finance provides a good example. When it is understood that a financial process like accounts payable or accounts receivable cannot truly be separated from its underlying application system then it is also understood that not only does IT facilitate innovation, but it also represents business risk. In essence Information Technology can no longer be seen simply as a cost somehow separate and distinct from the processes it automates. It has gone from being an option to a necessity, from an innovation to a utility.

This fact is magnified by regulations now in place, such as Sarbanes-Oxley, HIPAA, Basel II and a myriad of others, that affect how IT is expected to control and manage risks. This is a permanent change in the role of IT. Business leaders are now keenly aware of the impact their IT infrastructure can have on their careers and personal freedom. They have awoken to the co-dependence of modern business on IT.

# Catalogs as a means to effective governance

The IT industry as a whole is undergoing a transformation from an industry largely shaped by the leadership and personalities of individual IT executives and vendors, to one that is becoming more defined, homogeneous and regulated. Until recently, each organization's IT functions, controls and processes were largely defined by the company culture and the personalities of a series of Chief Information Officers (CIOs) and technical heroes. Based on this observation, it is not surprising to find the practices and definitions of IT Governance are vastly different from organization to organization.

The recent formalization of the concept, scope and role of IT Governance is largely being driven by a series of legislative initiatives emerging around the world relating to Enterprise or Business Governance. These legislations focus on the duties of public and private companies

to act in a manner of trust in relationship to the maintenance and security of customer data and the publishing of accurate financial information. This change in view is based on the understanding that core business transactions and data are directly linked to the IT Services and systems which store and publish this information, as well as the IT structures and processes which control and support these systems. As a result, governments around the world are requiring that IT organizations become accountable, formalized and auditable for their IT practices, processes and controls.

To achieve this objective, a global movement is evolving to formalize the scope of IT Governance as a consistent model, regardless of industry sector and geographic location. In short, IT is moving away from a model of informal and ad-hoc controls towards a regulated model of codes and practices. The concept of regulatory code is not new. Consider building and electrical codes that are designed to protect people and businesses. Many industry analysts espouse the concept of utility computing; the logical next step is to apply a code of practice to this new utility. In short, IT Governance is primarily concerned with supporting the objectives of Enterprise Governance and in doing so, establishes the basis for sound and aligned provisioning of services to the Business Customer. The ultimate driver for good governance should be related to meeting business goals and complying with regulatory and risk management issues facing Enterprise Governance.

The role of Service Level Management (SLM) and its primary tool, the Service Catalog, are critical success factors in the process of moving to repeatable and auditable service provision. The Service Catalog represents a trusted record of the services provided by IT, its default capabilities, measures and primary means of access and provision. In short the Service Catalog represents the value IT provides to business enablement:

- What is not defined cannot be controlled;
- What is not controlled and stabilized cannot be measured;
- What is not measured consistently cannot be improved.

## IT Governance definition

According to the IT Governance Institute (ITGI):

"IT Governance is the responsibility of the board of directors and executive management. It is an integral part of Enterprise Governance and consists of the leadership, organizational structures and processes that ensure that the organization's IT sustains and extends the organization's strategies and objectives." (Source: Board Briefing on IT Governance, IT Governance Institute, 2003)

The scope of responsibility of IT Governance has been summarized by the ITGI as covering the following areas:

- Strategic Alignment: With focus on aligning IT strategy and planning.
- Value Delivery: Optimizing service delivery, processes, quality and speed with expense.
- Risk Management: Addressing and ensuring the safe guarding of IT assets.

- Resource Management: Optimizing knowledge, IT environments, structures and establishing accountability.
- Performance Management: Monitoring IT Services and tracking project delivery.

These high-level objectives are also in line with SLM's process objectives and the development of an IT Service Catalog.

The interest in IT Service Management, the passage of business legislation that impacts IT (such as the Sarbanes-Oxley Act of 2002, or SOX), and the interest in standards are symptomatic of something fundamental to these governance principles. At the root of this focus on service, process and legislation is a growing awareness that there is no separation between business processes and the underlying IT Services and systems.

IT has become so vital to business that companies literally cannot function without it. For several years, organizations have increasingly leveraged IT to optimize the cost and efficiency of business processes. It's clear that no one is likely to revert to manual processes. Ultimately this means that every business process - whether it is banking, energy production, product shipping, invoicing, or something else - is dependent on business applications and infrastructure services. If the way a specific critical IT component enables or disables a business process is not understood, then the IT function cannot truly claim to be aligned with business. The process of understanding how IT relates to business starts with the definition and design of business-focused IT Services, which in turn is represented in an integrated Service Catalog.

# Catalogs and ITIL®

The IT Infrastructure Library (ITIL) framework was among the first to advocate that IT organizations begin process improvement initiatives by defining and documenting a portfolio of standard service offerings in a Service Catalog. ITIL recommends the development of a Service Catalog as the first step in the SLM process. The most recent ITIL Business Perspective publication reinforces the need to use a Service Catalog as the focal point for interactions between IT and business unit executives.

ITIL defines the Service Catalog as a list of services that should be presented in business terms. However, it does not provide concrete guidance about how to build a Service Catalog or recommendations about how best to make the catalog actionable and operational. In theory, the advice is sound – in practice, it has been difficult for many IT organizations to implement it. Too often, following this guidance leads to a significant investment of time to create numerous documents in an effort to develop a static Service Catalog that no customer will ever read or act upon. The primary purpose of this book is to help fill this void, and provide guidance to the practitioner.

# 1.2 Beyond Cost Center - managing business value

Once IT evolves from the management of technology, to the management of cost and business risk, the next step is to manage the alignment of the investment in IT capabilities with business value. The growing interest in service management is not only based on risk, but also on the desire to improve the quality, delivery, and value-add of IT Services. Done well, the development of Service Catalogs and Service Level Agreements (SLAs) can define success for IT operations and service delivery in alignment with the needs of the business.

The central challenge, however, is that the average IT organization today cannot articulate business value and cannot describe service quality in customer language. IT talks storage, the business talks stores; IT talks servers, the customer talks services. There's no visibility on what IT does or its cost structure. There are multiple channels to get anything done and most of them are broken. The business has no way to meaningfully compare against external service providers.

Compare this situation to other areas of the business and IT seems less than professional. A manufacturing manager sits in front of the IT director and says, "I can give you the run-down of my costs down to the cellophane wrapper, and I use that information to drive efficiencies in my supply chain. I want the same kind of detailed information from IT so I can drive those costs down." And many want market-based standardization so they can compare costs and efficiencies with other providers.

It's not that IT leaders don't get it, but they find it difficult to innovate when 70-90% of budget is already committed to keeping the lights on. There's clearly a disconnect between the demands and expectations of capability of the business and what IT can actually supply. The disconnect between business goals and IT priorities consistently ranks among the top three issues facing CIOs year after year. While the specific wording varies from survey to survey, the strong message is the same – business unit executives and End Users alike don't trust that IT is working on the right things to move the business forward.

# The trust deficit

Lack of trust creates a no-win cycle for the IT organization and the business as a whole. The cycle often starts when End Users' expectations for some of the basic services offered by IT are not met -a new PC is delivered later than expected, or setting up a new email account takes the user four phone calls to different help desks.

When the Business Unit asks "What's going on?", IT gets defensive and responds with fivenines up-time percentage charts and acronym-laden language that mean little to anyone outside of IT. At this point, the downward cycle has already begun and trust begins to break. There is no question that up-time is critical, but by itself that does not constitute a service to the customer. This kind of disconnect was well documented by the internal customer of a Fortune 500 IT organization. The customer put together a presentation to kick off an SLA review meeting, which included a slide of a dead animal. It was in response to presentations by IT of its great service level metrics. The slide said: "Yet the animal's still dead." The meaning was, of course, that "your numbers don't mean a thing to my issues".

At the heart of the problem is a breakdown in communication that impacts on trust from multiple directions:

- IT communicates using terminology and context that is difficult for business unit executives and End Users to understand;
- Business unit executives don't understand or have the patience to navigate IT's siloed operations to get the services and innovation needed;
- End Users don't know what to expect from IT, so they set their own expectations.

IT is no longer a monopoly provider, it has hungry and competent competitors after its business. Business unit executives may conclude that IT does not understand – or worse yet, does not care – what they need to run the business. When the time comes to make budgeting and investment decisions, business units are reticent to invest more in their IT black box. They now have options.

The result is that IT budgets either fail to grow as rapidly as the business or, in many cases, shrink compared to previous years. Since more than 70% of IT budgets are typically dedicated to 'keeping the lights on', the remaining 30% allocated for new projects often takes the brunt of these reductions. This means that new projects are often the first to be cut – the same projects that the business counts on for innovation and competitive advantage. Business units' remaining trust that IT is working on the right things vanishes.

# Escaping the cycle of distrust

Re-establishing trust between the business and IT means that IT must fundamentally change the way it views its relationship with business units and End Users. A critical first step is a fundamental shift in the mind-set of the IT Service delivery organization. Service delivery is no longer an employee-to-employee, or peer-to-peer relationship. What is needed is a shift to a provider-to-customer relationship where IT continually markets the value of the services offered – where Business Unit executive and End User expectations are not only correctly set, but consistently met.

Today's IT Organizations	Tomorrow's IT Organizations
Focused on Technology	Focused on the Customer
Firefighting Mode	Demand Driven
Organizational 'Stovepipes'	End-to-End Process
Unknown Costs	Financial Transparency
Technical Metrics	Business Value

Table 1.1 IT's role in the enterprise is changing

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IT must evolve to become an IT Service provider rather than a technology provider and custodian focused on keeping technology operational by deploying specialists at any cost and on a best-effort results basis. As a service provider, IT focuses on the customer and the services they are actually demanding; it manages the processes from demand to supply to vendor coordination. The decisions about which services to offer and which to outsource is be done in the language of the business, which is financial, rather than technical. Table 1.1 outlines some of the major changes that will occur.

Gone are the days when the internal IT organization owned a monopoly on service delivery. Now, the business demands transparency and visibility into the services and value delivered by IT. Today's Business Unit executives treat IT operations like any other vendor – poorly executed service today means they may shift to another vendor tomorrow. They expect IT to act like a business and be a partner. They expect IT to provide them with a clear catalog of services and effective SLM practices and processes.

## How to fail at SLM with SLAs

Many organizations that attempt to improve service fail miserably by starting in the wrong area. Instead of beginning their efforts with the construction of the service offers making up the catalog, they start the process at the last step – the definition of the SLA. IT practitioners naturally gravitate to what they know best – things like server configurations and availability metrics. This is compounded by the fact that many individuals and organizations are directed by well-meaning but misguided advice to start developing their SLM discipline with SLAs as the very first step toward improving business relationships. We think this is a mistake. Instead of approaching SLM from the technology out (i.e. SLAs), we believe organizations must work from the customer in (i.e. the Service Catalog).

IT organizations must understand that SLM's overall objective is to improve customer expectation and relationship around the delivery of IT Services. Most organizations are attempting to do this very thing when they begin to establish SLAs with their customers. However, they do so with little to no understanding of what the business needs, or is willing to pay for, nor what they can offer and reliably deliver. In addition, to this little or no agreement has been gained within the organization about operational agreements of how to support and deliver services within a siloed organization based on technology domains.

The story unfolds like this: a well-meaning IT professional calls a meeting with his or her Business Customer. This meeting is usually initiated by a demand from senior management to establish SLAs on a project plan stating the need for an SLA. The question then is how to develop a SLA in the absence of defined services. Since what is typically measured and understood within IT organizations are the technology domains, SLAs are documented on such things as applications in isolation or infrastructure components such as a server or set of servers. However, none of these things represent the end-to-end service the customer is consuming. Given this, let us return to the story. Since the individual calling the meeting wishes to be seen as service-oriented, the conversation starts with typical requirements-gathering questions: "We want to be a value-added partner and want to know what you need of IT so that we can enable your business." The answer, not surprisingly, is: "We need IT Services to be reliable, flexible and free." Translated, this means we want it all, we want it now and we don't want to pay for the privilege!

Unfortunately, at this point the IT professional, wishing to be customer-oriented, agrees and documents the customer's wishes in a SLA. However, there is little to no ability to measure whether or not the services will be delivered in accordance with this agreement. And there is little to no chance of the internal groups within IT agreeing on basic support policies around priority, escalation and notification.

The end result of this situation is the creation of a document which is unrealistic and has no real bearing on the IT organization's ability to provide services as promised. The final result of which is failure to deliver on the promises made! What was intended to be a document to improve the relationship and manage expectations became simply a large stick to be beaten over the head with.

By starting the process of SLM before understandingwhat IT Services the customer needed and was willing to pay for (and how they could be delivered reliably), the IT professional achieved the absolute opposite of the original goal of improved customer expectations.

# 1.3 Starting with the IT Service Catalog

One size does not fit all. That's one of the challenges facing IT organizations that have decided to start with the Service Catalog. The requirements and content are quite different depending on the audience.

The Service Catalog can provide an essential medium for communication and coordination among IT and its customers, and should distinguish between Business Customers (the ones paying for the service) and End Users (the recipients of the service). Satisfying both of these groups is equally important. In either case, the customer is central. To re-establish trust, the IT organization must address the unique needs of both customer segments. Depending on the type of customer, they require a very different view into the Service Catalog.

Service Level Managers, in turn, are responsible for the successful and reliable delivery of Services described within the Service Catalog. A Service Level Manager must be concerned with details that the various customer stakeholders don't need nor want to know. The Service Level Manager requires a detailed view of services and their components, sufficient to understand the relationships, dependencies and underpinning contracts and costs that make up a Service.

# The Service Level Manager view

ITIL suggests that the first step in implementing SLM is the development of a comprehensive Service Catalog where services are defined and documented in relationship to their true ability of being delivered with a reasonable level of consistency. Additionally, internal Operational Level Agreements and external Underpinning Contracts need to be established and documented before IT can go to the business to establish agreements around service delivery.

This detail provides the context, attributes and characteristics of how a service will be delivered. Once these foundational elements are in place, the IT organization is in a position to engage the customer in discussions about requirements based on the proven and documented services found within the Service Catalog. It is based on this detail that the Service Level Manager or Account Manager negotiates agreements, establishes costs and defines what metrics are required to evaluate the delivery of IT Services.

Each Service can contain key components documenting attributes of what, how, when and where services can be expected to be delivered. See for example table 1.2.

Description components	Delivery components	Agreement components
Name of the service	Service hours	<ul> <li>Identification parties (support, usage)</li> </ul>
<ul><li> Objective of the service</li><li> Ownership</li></ul>	<ul><li>Availability</li><li>Level of support</li></ul>	<ul> <li>Requests/amendments/ cancellations</li> <li>Service reviews</li> </ul>
<ul> <li>Target audience</li> <li>Reporting</li> <li>Functionality</li> <li>Configuration</li> <li>etc.</li> </ul>	<ul><li>Contingency</li><li>Performance</li><li>Security</li><li>etc.</li></ul>	etc.

Table 1.2 Description, delivery and agreement components

As per best practice, the Service Catalog is where the default detail for the services is documented and published. The SLA becomes either a subscription to the default or standard service as documented in the catalog or the documentation of a deviation from the standard offering.

## The customer views

Beyond the needs of the Service Level Manager, an effective Service Catalog targets two classes of customer:

• The **executive-level**, **service portfolio view** of the Service Catalog used by Business Unit executives to understand how IT's portfolio of service offerings map to Business Unit needs. This is sometimes referred to as the 'Service Portfolio' because of its use as a financial budgeting, planning and investment tool.

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• The **employee-centric, request-oriented view** of the Service Catalog that is used by End Users (and even other IT staff members) to browse and submit requests for IT Services. This is sometimes referred to as the 'Service Request' or demand catalog because it's used mostly for ordering services.

Individually, either of these views of the Service Catalog can help to re-establish trust. When the two types of Service Catalogs are used in concert as part of a complete Service Portfolio Management solution, IT organizations find they are able to quickly transform the IT-business relationship.

# The Business Unit view

Business unit executives need to understand the value that IT delivers. As the economic customer of IT Services, they look for a portfolio view of the service offerings that IT provides at the budget-planning level.

An executive-level service portfolio should describe the broad categories of services, and the fixed and variable cost-drivers, at the same aggregate level that the business units create their budgets. Examples of services represented in a service portfolio include:

- Call Center Operations Hosting: An ERP system to support 2,500 call center users with peak demands of 1,000 orders per hour, support for interfaces to a new order-entry system, and expected turnover of 150 call center staff per month. It includes all required infrastructure services such as bandwidth to call center, disaster recovery planning and 30 report changes per month. Cost drivers could be by person, per received call or per transaction processed.
- Field Repair Service: Enable 300 field-based maintenance and repair staff to access corporate systems from home offices including security, bandwidth and 24x7 Help Desk support. Includes all required infrastructure services such as SOX policy compliance audits, change management processes and asset tracking. The cost is per field staff or per customer visit.
- Retail Store Systems: Opening of 30 new storefronts per quarter including all required IT Services such as email accounts for all employees, cash registers, scanners, access to inventory systems, voice mail, remote back-ups and Internet connectivity. Cost is per store or per employee.

The primary purpose of this catalog is to enable the IT Relationship Manager to accomplish six objectives:

- 1. Communicate the services that are available from IT so they are linked to operations of the relevant business processes in language and metrics that are relevant to that executive's budget.
- 2. Provide service level options that allow service quality and costs to be dialed up or down, new services to be added, and old services to be retired based on business impact.
- 3. Enable budgeting for current, fiscal and future fiscal years.
- 4. Have the services available as elements for building agreements with the business.
- 5. Have IT report to the business the actual and forecasted consumption of those services to enable the business to govern consumption.

6. Enable IT to more effectively plan demand and supply of services and resources, including vendor negotiations.

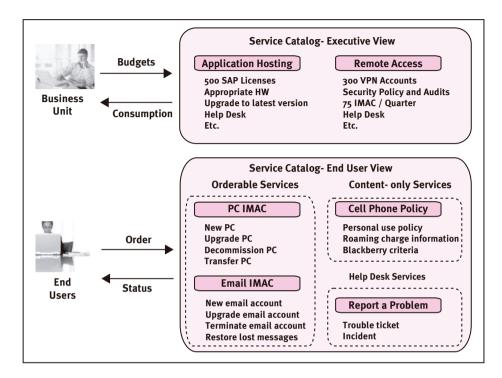


Figure 1.1 Characteristics of different customer views of Service Catalogs

## The End User view

End User employees want improved day-to-day service. While business value is important to employees, what's critical is that the day-to-day IT Services they need to perform their job are easily accessible, delivered consistently, and of high quality.

End Users need an actionable and easy-to-use Service Request catalog that describes the services they can order or request from IT. Items in this End User Service Request catalog may include:

• Orderable services: Any services where the user initiates a Service Request that results in a series of delivery activities. Examples of orderable services include the traditional IMAC (install, move, add, change) services required to provision a new PC, upgrade an email account or provide access to an application. Other examples include more 'advanced' IT Services – such as application enhancements, or even IT-to-IT requests like setting up a new server to host an application. Delivery plans for orderable services can be fully automated (e.g. access control automatically grants access to a system for a new user), or involve human intervention and delivery (e.g. physically move a server from one location to another).

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- **Content-only informational services:** Any services that address a user's informational needs without requiring a delivery activity. Many organizations use content-only informational services to publish and make policy guidelines, who to contact information, FAQs, and other information readily accessible to End Users. Questions may include: "When am I due for a hardware refresh?" and "Who can get a blackberry and why?"
- **Support services:** Support services provide a self-service front end to problem and incident-tracking systems. Users can browse the catalog to find recommended steps to fix common problems or, in the event this does not work, submit an incident request that generates a traditional trouble ticket in the appropriate Help Desk system.

# 1.4 Putting it all together: the front office of IT

Today most IT organizations are little more than a loose federation of technical and functional silos. IT tends to be defined more in terms of its technical and functional parts (e.g. Desktop, Storage, Service Desk) than as a single, integrated IT organization, much less as an organization that is fully integrated with the business. Going forward IT needs to maintain its ability to deliver within these technical and functional silos, either directly or through external providers. It also needs to put in place the practices, processes and tools to operate effectively as a truly integrated organization, which functions more like a business. The business risks associated with IT Service failure are too great to make infrastructure component changes, for example, without adhering to common, cross-functional Change and Configuration Management processes. Similarly, the services that IT provides its customers are becoming too important and intertwined with the core work of the supported business to leave it up to the customer to assemble the services they may need from the various parts of the IT organization.

If the potential transformation of IT is viewed as "beginning to operate more like a business", the necessity of a Service Catalog becomes apparent. What business today can operate without clearly defining its offers and products in terms its customers will understand and value? A Service Catalog is at the heart of every business large and small. Imagine a restaurant operating without a menu. The menu defines the restaurant and is the means by which the restaurant engages with its customers. Moreover the menu defines the skills required of the cook and the organization of the kitchen, down to the ingredients on the shelf. The same is true of any large multi-national corporation. Every company defines itself in terms of the products and services that its customers consume, and organizes itself to best facilitate the marketing, sales, manufacturing and delivery of those products and services.

The implications for IT organizations are twofold. First, if IT is to truly operate more like a business then it must clearly define a set of offers to its customers, and communicate these to its customers in the form of an IT Service Catalog. The second implication is that the Service Catalog is not a stand-alone concept, but rather is an integral part of the front-office and back-office IT business processes that IT needs to cultivate in order to operate as an integrated business. Much as a Configuration Management Database (CMDB) has value only in the

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context of the processes it supports (e.g. Change Management, Incident Management, SLM), similarly a Service Catalog must be thought of and created in the context of the key business process it supports. In other words, a successful Service Catalog needs to move beyond the definition of what the IT organization does, to be 'actionable' in the sense that it is an integral part of how services are ordered, delivered, tracked and paid for.

Figure 1.2 identifies at a high level the key, cross-functional processes that modern IT organizations are being asked to put in place to support integrated IT front-office and back-office processes and the relationship of these processes to a Service Catalog.

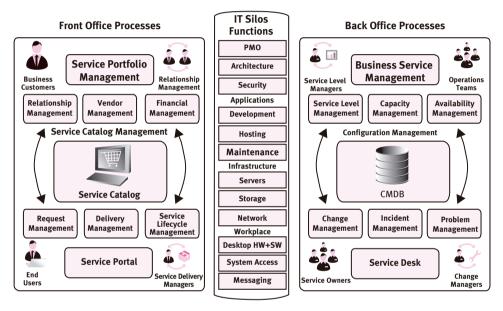


Figure 1.2 Key cross-functional processes

# 1.5 Looking into the future: an IT maturity model<sup>2</sup>

It is tempting to assume that the ultimate position of IT is to be one of a value driven provider of services to its primary client-'the business'. From these images one gets the mental picture that the business and IT are sitting across the table from each other in a respectful but separate relationship. However, if there is no separation between business processes and information technology, the model of supplier-consumer is again an artificial construct that limits the use and advantage of IT and places both parties at risk.

<sup>2</sup> Maturity Model based on writings by Jan Duffy 2002, IT/Business Alignment: Is it an option or is it mandatory?

To put this in perspective, it is important to first understand that Information Technology is only the latest of a series of technological advancements that have pushed business and commerce new levels of automation and efficiency. The introduction of electricity, the advent of transportation systems and the most recent case of manufacturing technology have all gone through a similar model of adoption and integration with business processes. When these earlier technologies were introduced, they were seen as additions to the business models of their day and adopted in increasingly innovative ways until they became so intrinsic to the way business was done that separation was no longer possible. In the early phases of these technology adoptions, specialized management groups were created alongside the business organization to manage and maintain these technologies.

Business planning at the boardroom level for a manufacturing organization would not occur without the inclusion of 'business roles' responsible for assembly line technology. However, this same organization – which is reliant on applications and IT infrastructure to support these older technologies – would not even pause to consider the CIO as an appropriate participant in this planning process. This is because neither the business nor IT has realized that IT is now as much 'the line' as the older and more mature manufacturing technology.

The good news is that this will change as the natural adoption and integration of IT takes place. We believe that as this happens, IT will evolve through four different maturity levels.

# Level One: Intuitively connected but practically separated

This first level of maturity represents an organization that philosophically understands that it connects to and supports the business but has no true understanding corporately of how this occurs.

At this level of relationship IT management is focused on the management of component parts and technology domains. The goal of the business organization is to drive down what it believes are uncontrolled costs associated with what it feels is a necessary evil. IT operates in a black box mentality with the business-, "you provide the funds and we will produce the technology". Little or no visibility is provided on how costs are associated with business value.

The siloed approach to managing IT is inefficient. While budgets have remained flat, IT organizations still must support new business initiatives. They face greater pressure to increase efficiency and reduce costs in infrastructure maintenance and IT operations. Different parts of the organization are often unaware of what is happening in other areas and, as a result, groups work at odds with each other. Planning and procurement occur at a departmental level instead of an enterprise level, which leads to IT tools, such as monitoring software, Incident Management systems and inventory products, being purchased redundantly by individual groups.

At this point of maturity, when IT is required to develop SLAs, documents are drawn up against technology components like groups of servers or against an application in isolation to the rest of supporting infrastructure and database elements of the application system.

Without a doubt, the most difficult task facing IT executives at this level of maturity is to convince "techies" that they don't manage boxes and applications in isolation. For example, to the IT organization focused on managing and optimizing technology domains, the processes represented by ITIL, as well as the definition of a Service Catalog, may seem like an incredible overhead or at best a good idea to be done at a later time. This type of organization will not perceive the value of a Service Catalog and will question the benefits. Questions will be raised, such as "Where is the return on investment in implementing these processes and tools?"

## Level Two: Are you being served? The supplier-consumer model!

Moving to a service provider model is a significant improvement over a technology management focus. The concept of a customer is well understood and the position of IT as a business enabler is grasped by the IT executive if not by the business executive. At this level there is recognition that IT domains and components cannot be managed in a sense of artificial isolation and there is a project or initiative to understand the relationships and dependency between technology components. It is at this point that a business-focused attempt at developing a Service Catalog is undertaken.

The goal of this organization is to build a best-in-class supplier consumer model where informed discussions around service delivery are supported by a comprehensive catalog of services and documented in customer-facing SLAs.

At this point of the maturity model, internal OLAs have been established to support the service offerings and customer-facing SLAs are inclusive of all of the elements that build the services defined in the catalog. At the earlier stage of maturity the organization struggled with the cost justification of establishing service support and service delivery processes. However, at this level of the model processes such as Incident, Change and SLM are seen as simply the cost of doing business. Logic dictates that to be a service provider, cross-functional processes must be defined and followed by all groups within IT.

However, while this level of maturity represents a significant improvement over the first level, it still propagates the myth that somehow IT is separate and distinct from the business processes. This separation encourages a world view that has the internal IT group perceiving itself to be outside the business walls looking in.

# Level Three: Reluctant and awkward dependency

Reluctant dependency refers to a state of maturity where both the business and IT executives realize the interdependency of their organizations. At this point there is a growing realization of risk and ultimate dependency.

It is precisely because of to this understanding of risk and interdependency that governance and legislation have placed requirements on IT controls and processes. The result of this awareness translates into the following scenario:

- The financial results of a company are a direct result of business processes.
- Business processes are dependent on IT Services and systems.
- IT Systems area directly impacted by the maturity and controls of IT processes.
- IT professionals have a direct impact on the consistency of IT processes.

Following this argument there is no true separation between IT and the business. This leads to an interesting discussion when looking at traditional outsourcing sales models focused on outsourcing IT elements believed to be non-core competency. What happens when an organization realizes that IT is at the root of its core competency?

At this stage of maturity, both the IT and business executives struggle with the implications of these conclusions. The positive outcome is that the IT executives now begin to be included at the board table as a peer instead of a service provider.

# Level Four: Together we stand, divided we fall

If the first three levels of maturity represent the evolution of an IT organization within the business, the fourth level represents the end state where IT is recognized as an inherent part of the business organization in the same way the preceding technology advancements were. There is now no longer a philosophical organizational separation between IT and the rest of the business. The IT organization is seen, and perceives itself to be, part of the underlying structure that supports the processes represented by the business model.

In a sense the customer is no longer the Business Unit across the table but is now the external customer of the business. Business planning is not attempted without considering current or future technology advancements. Stepping back from this longer term vision of business and IT integration, throughout the balance of this book we will focus on practical next-steps for IT organizations that have recognized both the need for change and the necessity of building from the solid foundation of a robust and effective Service Catalog.

- 1. We will answer the question of what constitutes a Service. We will talk in both general terms about the notion of Service, and very specifically suggest a model for what a Service, in the context of an IT Service Catalog, needs to contain from a definitional sense.
- 2. We will answer the question of how an IT Service Catalog makes a difference. We will highlight what makes a Service Catalog effective and relevant, and what business value can be expected and achieved.
- 3. We will explore how an IT Service Catalog and SLM processes are effectively implemented. We will discuss key roles, integration with key ITIL processes and the relationship of the Service Catalog with IT Service Management tools.
- 4. We will draw upon our collective experience of implementing IT Service Catalogs to answer the question of how they can enable the broader transformation of an IT organization that runs more like a business.

# 1.6 Case study

A leading Fortune 500 company recognized the limitations of its internal service processes as the corporation rapidly extended its worldwide operations. Faced with the realization that its existing organization, practices, processes and systems could no longer keep pace with the growth and demands of the business, the company launched a Service Catalog initiative as the cornerstone of a multi-phase initiative to transform its organization.

# Phase One (starting with an End User focus)

During phase one of the project, more than 100 of the services most often requested of IT by its End Users were defined and published in an actionable Service Catalog – providing End Users with a single web-based catalog for ordering services. The results? Improved employee productivity by eliminating more than 1 million hours in time spent waiting for services, an annual cost savings of approximately \$1.5 million, and a three-year ROI of more than 300%.

# Phase Two (expanding to address Business Customers)

Leveraging the success and experience gained in phase one of the project, the team is now engaged with a broader initiative to add a Business Customer-focused layer to its Service Catalog, designed to support evolving relationship management and SLM roles and processes. This initiative includes the ability to selectively source certain services with external providers.

# The business challenge

With an employee base of over 70,000 and an annual growth rate exceeding 15%, the demand for internal services at this Fortune 500 corporation had grown along with the business. The volume and range of requests for services continued to expand each month. However, the existing service delivery processes were inefficient, unmanageable and getting worse by the day. For IT Service Requests, in particular, the labor-intensive process was unwieldy and expensive:

- End Users submitted a form with their request for service;
- An eight-person administrative team received the requests;
- The administrators processed and routed requests to the appropriate IT staff or outsourced service teams;
- Any pertinent information missing from the original request meant that the IT representative would need to backtrack, find the appropriate requestor, and clarify the problem.

41% of services were delivered late (according to internally defined metrics of what on-time meant). End Users had no visibility into the status of their Service Requests, resulting in additional inquiries to determine when each service might be completed. The backlog in requests for IT Services alone resulted in more than 3 million hours of wait time each year (hours spent effectively waiting in line for needed services). To keep up with the needs of the business, and the increasing volume of services demanded by the employees, the IT Service organization had to find a better solution.

# Running IT more like a business

The company recognized that inefficient service delivery operations were creating an expensive, unnecessary tax on corporate productivity. The problem manifested itself in a number of ways, including duplication of efforts, re-work or re-delivery of services, ineffective scheduling of service delivery teams, and employee dissatisfaction with internal services. To keep pace with the business, the service teams needed to find ways to deliver those services on-time and more cost-effectively.

The company articulated and embarked on a project to define and publish a web-based Service Catalog that could automate the entire Service ordering, approval and delivery cycle, by enabling self-service for employees as well as streamlined processes for service delivery teams. In addition management needed a solution to track and manage key service performance metrics such as on-time delivery and the cost per service delivered.

The goal was to run IT like a stand-alone business – with greater visibility and control of costs and quality of service.

# The Service Catalog delivers

Leveraging a commercial, off-the-shelf Service Catalog solution, within 10 weeks the team had a Service Catalog up and running with 100 IT Services – providing a single web-based point of contact for employee Service Requests. The solution was integrated with other enterprise systems (e.g. LDAP, Single-Sign-On and Service Desk ticketing) to ensure a seamless and automated service delivery experience. In the following months the company deployed an additional 400 service staff and all requests for IT, telecommunications, security, and facilities services are now ordered and processed through the Service Catalog, which became the most often accessed point on the company's corporate intranet.

# Lower costs and improved service quality

With the implementation of an End User focused Service Catalog as its phase one, the company has seen tangible and immediate benefits. The average cycle time for service delivery was reduced by more than 30%. On-time delivery of services increased from less than 60% to greater than 90%. And these results continue to improve: the cycle time on requests for new laptop PCs was recently reduced by more than 50%. The impact on employee productivity has been substantial, eliminating an estimated 1 million hours each year in time that employees wait for internal services.

Productivity of the service delivery teams improved as well, as service staff members are better able to set priorities and manage their workloads. Utilization of existing service delivery staff increased by 20%, and six service administrators were reassigned – resulting in approximately \$300,000 in annual, recurrent savings. Service delivery processes have been streamlined and manual efforts are now automated. On average, the company reduced the cost of service delivery by 37%, or \$42 per Service Request.

There are intangible benefits too. Employees are happier with the quality and timeliness of services they receive. By ordering from a catalog of standardized services, employees submit a clear and complete Service Request the first time – eliminating follow-up clarification calls and emails with service staff. Proactive notifications and online status updates keep employees informed of delivery status and expected timing. Real-time management reports provide key metrics to indentify bottlenecks, improve quality, shorten delivery cycles and even pinpoint services that may be better performed by external service providers.

## **Results that count**

The company has calculated a cost savings of approximately \$1.5 million annually, and a three-year ROI of more than 300%. End User Service Requests get handled faster and with fewer errors, increasing overall corporate productivity. Service teams can accomplish more with the same or fewer resources. Service executives can demonstrate the value of internal services to the Business Customer and rapidly align service delivery offerings.

Perhaps more important than any particular benefit is the renewed trust and credibility that the IT organization generated for itself in the eyes of its Business Customer partners. Having established that it can effectively and efficiently manage the day-to-day Service Request processes, the IT organization was given a broader charter to engage with the business not simply as a Cost Center that needed to be managed, but as a partner in the operations of the business. The success of phase one has led to a more ambitious phase two that seeks to expand the role of the Service Catalog in the operations of the company. 20 DEFINING IT SUCCESS THROUGH THE SERVICE CATALOG

# **IT Services**

As IT organizations evolve into a Service Delivery model it is important to understand where the industry has come from and how Technology Management differs in focus from Service Management. Over the last 20 years IT planning, strategy, recruitment, skills training, and reward and incentive programs have focused on developing centers of technology excellence. Individuals are hired and trained to hone their technology skills to optimize and reduce cost around the use of new technology innovation. However, for the most part education about the business perspective was ignored. Nowhere is this clearer than the fact that most computer science degrees have until recently been purely technology-focused and have little or no focus on teaching general business principles.

This training and hiring model results in technology domains where the technology components are managed in artificial isolation from each other. In a technology-focused IT organization there is little or no information available about which business processes are supported by which components.

Evolution of a service mentality starts with the awareness that a rudimentary responsibility of IT is the understanding of how any given critical IT component enables or disables a business process. Until this is known it is difficult to claim that IT is aligned to business goals. This initial understanding of risk begins to establish the need to maintain the relationship between IT components which ultimately are assembled into IT Systems and services. The definition and presentation of these services are presented as a structured portfolio of services found within the Service Catalog.

In summary, technology management is focused on the cost-optimization of technology domains, whereas a Service Management organization is focused on how technology components or professional activities are assembled together as IT Services which support the enablement of business processes. If the premise that a technology focus is not sufficient for business enablement and creates business risk is accepted, than it is logical to assume that an IT organization must understand itself as a service provider with a goal of business enablement and optimization.

The logical place to start this journey is first to understand of the business processes that IT Services support. Without this core understanding IT tends to try and define services from the bottom up instead of the top down. This technique is doomed to frustration and must be reversed. To understand how business processes are supported by IT Services the following approach is recommended.

# 2.1 Steps for defining IT Services

The following section defines the logical and sequential steps to define a list of IT Services. Those steps are:

- 1. Define major business processes
- 2. Define enabling IT Services
- 3. Map IT Systems to IT Services
- 4. Map IT components to IT Systems
- 5. Service Based Costing

## Step 1 - Define the Business Processes

The most appropriate way to define IT Services is from a business or customer perspective. To determine this, IT must understand how it facilitates the business in enabling the various business processes. The place to start this activity is to define what the business processes are. The following model (figure 2.1) is taken from the ITIL version 1 book *Understanding and Improving (1996)*. This model breaks the business processes down into four major categories.

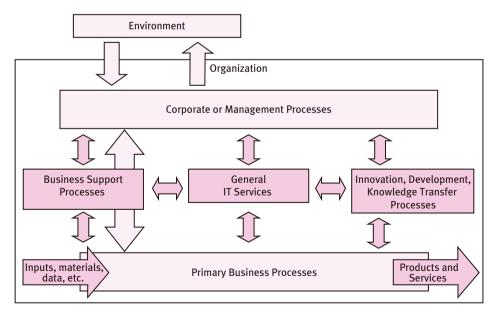


Figure 2.1 IT Services and business processes, source: OGC

- Primary business processes: Represent the main activities at the core of the organizations business model. For example:
  - Banking: Check Processing, Account Management, Mortgage Services, Internet Banking and Trading
  - Utilities: Power Generation and Distribution, Maintenance
  - Oil and Gas: Deep Water Drilling, Pipeline, Refining, Retail
- Support Processes: Represent the business processes that are used by all other business units such as:
  - Human Resources
  - Finance
  - Enterprise Procurement
  - Legal
  - Facilities
- Innovation Processes: Represent processes that position the organization and products within the market such as:
  - Marketing
  - Research and Development
  - Corporate Communications
  - Sales
- Management Processes such as:
  - Strategic Planning
  - Market Intelligence
  - Enterprise Risk Management

Each of these categories typically represent business groups that utilize both a set of general IT Services as well as application-based services which are uniquely used by specific business units to enable their business process areas. In turn most major business processes such as Financial Management have sub-processes such as Payroll. The first step in developing a customer-facing Service Catalog is the definition of all major business processes and sub-processes. This is a requirement in order to understand the next step, which is to map application and general IT Services to each of these primary business process areas.

# Step 2 - Defining IT Services

In order to understand how to define customer-facing IT Services it is necessary to first define what an IT Service is. According to ITIL best practices the following definitions can be understood:

**IT Service:** One or more technical or professional IT capabilities which enable a business process. An IT Service exhibits the following characteristics:

- Fulfills one or more needs of the customer;
- Supports the customer's business objectives;
- Is perceived by the customer as a coherent whole or consumable product.

Note: By this definition a service is a capability, not a technology solution or vertical domain such as a server environment or a business application.

**IT System:** An integrated composite that consists of one or more of the processes, hardware, software, facilities and people, that provides a capability to satisfy a stated need or objective. An IT System:

- Is a collection of resources and configuration items or assets that are necessary to deliver an IT Service;
- Is sometimes referred to as a Technology Solution.

Note: The technology system is the complete composite of IT components from various domains which when brought together in a relationship represent a value-added technology solution; for example, a Local Area Network or an application system such as an Enterprise Resource Planning. A system is not referring to the application as a stand-alone element but to all of the components which build the complete solution (application, databases, servers and middleware, etc).

**Configuration Item (CI):** A component of an IT infrastructure that is part of an IT System. CIs may vary widely in complexity size and type – from a document or policy to an entire system or a single module or a minor hardware component.

**Technical and Professional Services:** When defining IT Services it is necessary to understand that there are two basic types of services that IT provides. These two types can be loosely classified as either 'Technical' or 'Professional' services.

A 'Technical Service' is defined as a technology-based capability that the customer consumes or uses in order to facilitate a business process or function. Technical services can be further understood as either application services or infrastructure services.

Examples of Technical Services are:

- General Infrastructure services such as:
  - Messaging/Email
  - File/Print
  - Network or Internet access
  - Office or desktop productivity
  - Voice Communications
  - Application Hosting
  - Storage Management
- Application-based services such as:
  - Financial Management Systems
  - HR Support
  - Power Generation Applications
  - Refining and Control Systems

Note: It is best practice to name the application-based service as closely as possible to the name of the business process it supports. This will be a critical step in understanding the business impact of IT Service or component failure.

The benefit of aligning the IT Service names with Business Processes is that it improves understanding for both the customer and IT staff on how technology is aligned to meet business objectives.

A 'Professional Service' is defined as the value-added activities that IT staff provide in order to support, maintain, monitor or ensure the consistent and reliable delivery of the technical services. Examples of Professional Services are:

- IT Architecture & Engineering
- IT Security
- IT Support
- Project Management Services
- IT Consulting
- Application Development and Enhancement Services

Note: It is very important that the IT organization takes the time to define professional services, since in most organizations 60% or more of the annual IT budget is spent on these services. If these services are not defined, these costs are reported as a non-value-added overhead. In summary the organization that does not define as many valued-added professional services as possible looks very fat when considered as an outsourcing option.

**IT Services versus IT Processes:** As discussed in this section the definition of IT Service represents the intelligent bundling of technology components and professional capabilities into IT Services which support Business Units and their corresponding processes (see figure 2.2). However, in the same manner that the Business Units have processes to accomplish and deliver to business goals, IT also has processes which exist for the sole purpose of supporting and delivering IT Services to its business partner.

As part of the movement towards a standard, regulated approach to the delivery of IT Services, there is a growing recognition that there is a benefit and perhaps even a requirement to apply internationally recognized best practice standards to the management of IT processes. The identification, selection and adoption of these standards is a part of the developing role of IT Governance. Where process models such as COBIT can provide a scope of what elements need to be in place, it is necessary to strategically select a collection of best practice frameworks covering the various areas of IT management to understand the requirements at a level of detail which can be executed.

The following are commonly used models adopted to satisfy governance requirements:

- Application Lifecycle Management: Capability Maturity Model (CMMI)
- Service Management: ITIL

- Security Management: ISO 17799
- Computer Operations and Data/LAN: Electronic Telecommunications Map (ETOM)
- Quality Management: Six Sigma/ISO
- Project Management: PMI or PRINCE2

Each of these best-practice process frameworks work in collaboration to deliver high-quality, consistent and reliable services to the business function.

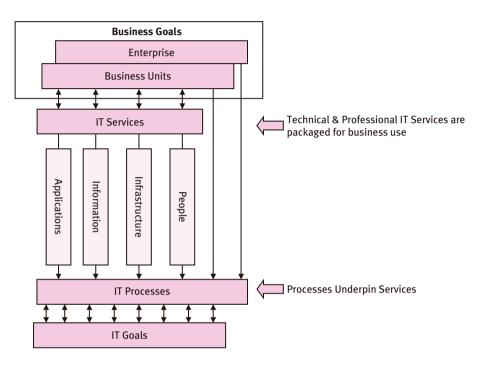


Figure 2.2 IT services versus IT processes

# Step 3 - Map IT Systems to IT Services

The next step in this process comes more naturally to technical people since it involves defining and naming the IT Systems which the IT organization delivers and supports and mapping them to the IT Service definitions. Remember that an IT System is a collection of components required to deliver a Technology Solution to a customer. Often the IT System inherits the name of the primary application it is delivering. Another principle to keep in mind is that while there is a single IT Service definition, there are no limits to how many IT Systems can be mapped to this capability. Some examples of Service/Systems are listed in table 2.1.

When all IT Services and Systems have been defined by SLM, this information is provided to Configuration Management to facilitate the design of the CMDB Object Model and to Financial Management for the development of the Service Based Costing and Billing Models.

IT Service	IT System
Email	MS Exchange
	Lotus Notes
Shared Infrastructure	Data / LAN
	Voice
	Storage Management
HR Management	PeopleSoft
	Payroll

Table 2.1 Some examples of Service/Systems mappings

# Step 4 - Map IT Components to IT Systems

Once IT Services have been defined and documented the next step is to leverage the Configuration Management process to model those services within the CMDB. Through object and data modeling techniques, a database of CIs can be created to present both a business service view as well as a technology view of how CIs are related in order to support business processes. In effect the ultimate goal of Configuration Management is to facilitate the creation of a real-time virtual model of the IT environment in relation to how it supports and delivers IT Services to Business Customers.

## Configuration Management objective

Configuration Management provides a logical model of the infrastructure or a service by identifying, controlling, maintaining and verifying the versions of CIs in existence. The goals of Configuration Management are to:

- Account for all the IT assets and configurations within the organization and its services;
- Provide accurate information on configurations and their documentation to support all the other Service Management processes;
- Provide a sound basis of data other processes such as Incident, Problem, Change, IT Service Continuity and Financial Management.

Configuration Management is an important part of the ITIL Service Management framework. It serves as the central hub for information sharing and collaboration.

## Configuration Management IT Service Data Modeling

In order to model IT Services, an Object and Data Model must be developed to illustrate how different CI types are represented, their attributes and their connecting relationships. The data model dictates how IT Services are mapped in the CMDB. Without the inclusion of the IT Service structure in the CMDB, the database is of use only to technology groups and does not supply important data on business use and impact.

## To use an analogy:

If the infrastructure is the puzzle and the CI the puzzle piece, then the Configuration Management Object Model design is the picture on the puzzle box.

Just as it is difficult to build a puzzle without the picture, it is difficult to understand how various CIs fit into a service architecture without the Object Model (fig. 2.3 provides an example Object Model).

Some key benefits derived from this model are:

- An understanding of how CIs within the scope of the process relate to IT business services;
- How direct and indirect asset costs are related to IT Services;
- How Availability figures relate to individual CIs, groupings of CIs and overall Service Availability targets;
- Which CIs facilitate multiple IT Services;
- Prioritization of CIs in relation to business criticality and function.

For each of the IT Business Services and technical IT Systems defined by the SLM Process there will be a record created in the CMDB within the logical structure. Once this structure is built within the tool it will remain relatively static and will not change drastically unless a new service is introduced to the environment.

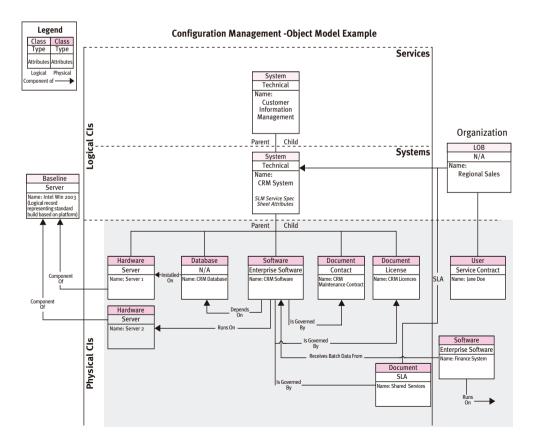


Figure 2.3 Configuration Management Object Model Example

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# Step 5 – Service Based Costing

A logical extension of the service structure is the development of a service-based costing model. When services are defined in the catalog it becomes necessary to align the costing mechanisms for how IT provides visibility into budget and accounting practices. Traditional Cost Center accounting tries to establish ownership for individual IT components to the business units which use them. The complexity of this model is that there are very few assets which are used exclusively or actually owned outright by a specific business unit.

Service-based costing takes a different approach. Its goal is to completely cost all services discretely in relationship to their direct, indirect and overhead allocation. Following this step decisions are made as to which services will be presented directly to the business client and which ones will be bundled as component or indirect services.

For example, an application service supports Mortgage accounts. As part of the Mortgage service a business chooses to allocate a certain percentage of the following indirect services:

- Hosting
- Storage Management
- Security
- · IT Service Continuity
- IT Support
- Network

The total cost of the Mortgage service would include 100% of direct costs, an allocation of indirect and a fair percentage of true overhead (see figure 2.4).

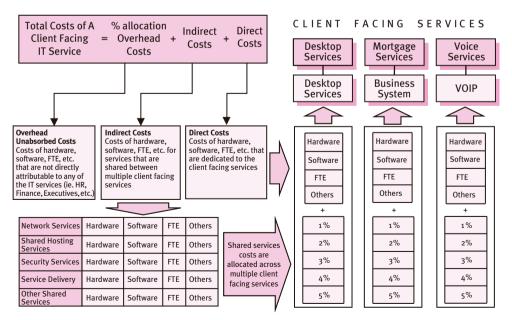


Figure 2.4 Service Based Costing example

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The starting place for this process comes from the service structure found within the Service Catalog.

# 2.2 Who's on first? Start with the Service Catalog

With a view of how the CMDB and the Service Catalog relate, the next question is, where to start? The answer depends on the specific pain being resolved and the level of maturity of an organization.

If persistent problems in keeping key applications available and maintaining a basic level of support is the concern, then solve that first; a focus on Incident and Change Management processes may be the right thing. For most organizations, however, it makes sense to start with the Service Catalog early in an IT Service Management program. This could be as simple as a Service Catalog that maps to an inventory of applications. Think of this as a first phase catalog. It may include elements such as descriptions, service level options and included services, but need not initially include detailed information related to component services, pricing, costs and so on.

This first phase catalog is needed because the structure of the CMDB and the relationships need to make sense from the perspective of a service, and a service is always defined from the point of view of a customer. Defining services has to come first. This drives the structure of meaningful relationships which will then inform the CMDB.

Starting the other way around and trying to create the service from the CIs upward will not work. It is like trying to construct a meal for a restaurant by documenting the relationship between kitchen appliances. It will not succeed. Start with a menu of offerings (the catalog), which then drives the procurement of ingredients, the assembly of recipes and infrastructure of the kitchen.

The benefits of starting with a Service Catalog are several:

- 1. Rather than trying to reconcile thousands of CIs and attributes, start with the business view of the service and focus on just those aspects that are relevant.
- 2. It will make the CMDB project more relevant and visible to the business because IT will be able to paint a picture that aligns with its concerns in a language it can understand.
- 3. One of the CMDB's goals is to support effective Change processes that ultimately reduce down-time in operations by taking into consideration relationships between different items before changes happen. By enabling the IT organization to standardize the IT infrastructure on a controlled set of standardized services, the Service Catalog serves to reduce the complexity of the infrastructure that needs to be mapped in the CMDB and managed via Change processes.
- 4. Implementing a catalog first reduces project risk. An enterprise CMDB project is a multi-year effort and could easily devolve into a very IT-centric technical project which,

by the time it is complete, may no longer align to services the customers care about. Starting with the Service Catalog ensures that the CMDB project remains aligned with the customer's concerns.

5. Finally, there are issues of compliance and financial reporting to consider. SOX and other regulations in this vain, are bringing a new focus on risk management. In the next few months, the CFO will be asked for some simple reports – stuff that surely is already available. And, the CFO will say, "No problem go talk to …" You? Your boss? There will be an auditor asking for documentation regarding which businesses consume which services. They will be concerned with how costs are allocated depending on service consumption. Is a Business Unit underpaying to make results look good? The Service Catalog will be the key lens through which IT activities and costs will be examined.