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Overview of IT Service
Management Using the
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Introduction

Most information technology managers have heard of the term IT Infrastructure Library, or ITIL®. Investments in information technology can and do produce competitive advantages for the enterprise, but only when managed correctly. The latest version of the ITIL provides concrete guidance for both business and IT managers with regard to realizing value from information technology investments. With the increasing importance of IT services to day-to-day business activities, ITIL is something all IT managers must at least consider.

The purpose of this paper is to introduce managers with an interest in information technology to the ITIL. You will become familiar with ITIL processes and understand where ITIL fits within your organization. You will be able to identify the benefits available from ITIL and craft a high-level business case for ITIL adoption in your organization. This paper achieves this goal by first describing the context for ITIL, what it is, and how it works, and then describing the benefits others have found from ITIL adoption. Along the way, you'll be exposed to the issues faced by IT managers and their business units, realize how IT commoditization offers an opportunity to excel, and learn how to achieve strategic benefit through operational excellence.

Brief History of ITIL v3

The ITIL (IT Infrastructure Library) is a collection of books. The current version, version 3, consists of five volumes. This version of ITIL was released in 2007. The previous version, version 2, consisted of seven volumes and was released in 2001. Earlier versions of ITIL can be traced back to the late 1980s.

Regardless of the version, the ITIL consistently presents an evolving and integrated approach to managing IT services. The concept of managing by service is relatively simple—in order for the IT service provider to add value to its enterprise and its consumers, the IT provider must focus on end-to-end service delivery. This requires the provider to understand the marketplace within which the consumers of its services operate. From a normal corporate or enterprise perspective, this means the IT department must understand not only its business customers and users, but also the marketplace within which the enterprise offers its products. IT value arises at the boundaries between the enterprise and its marketplace. IT services provide an indirect value—the IT service facilitates the interaction of business customers and users with enterprise end-customers and end-users.

The reasons for ITIL adoption are many; however, the primary driver is IT commoditization. IT commoditization refers to the fact that businesses today are more and more dependent upon IT services. As the cost for hardware and software falls, the ease with which it may be interconnected is increasing dramatically. This presents business with many alternatives to the traditional IT organization. Many businesses simply acquire and install

systems on their own that were traditionally the purview of an IT organization. In many organizations, such ad hoc business IT systems are then connected to traditional business IT systems. The result is an incredibly complicated environment that shows no signs of decreasing in complexity.

While business not only assumes the mantle of IT provider in many cases, the requirements business places upon the IT organization and technology in general is also increasing. Referred to as variability, the issue is that as a business becomes more entwined with information technology services, it can sustain less and less variation in the quality and delivery of those services.

For the IT organization, this combination of factors represents an “IT perfect storm.” Simply put, today’s IT manager faces ever-growing complexity with diminishing tolerance for poor quality. This, combined with economic realities such as decreasing IT budgets and headcounts, represent a no-win situation—not just for the business but also for the IT organization.

From this vantage point, ITIL begins to describe how the well functioning IT service provider aligns with its business, understands its marketplace, and balances its resources in ways to best benefit the business. For these reasons, the ITIL has become the global de facto best practice for managing IT operations worldwide. ITIL is also supported with an international standard called ISO/IEC 20000, or ISO20K. The combination of the two provides virtually everything an IT manager requires to align with business, control the costs of IT, improve IT service quality, and balance resource allocations.

Since the business does not operate independently of the IT systems or the IT organization, it is equally important for technical and non-technical managers to understand how they must work together. The ITIL provides such a roadmap.

The State of IT Today

One cannot overstate the criticality of ITIL at this very important juncture in history. There is a tremendous disconnection between the consumers (that is, business customers and users) and the providers (that is, the IT organization) of IT services. Recent surveys continue to show a substantial gulf between the two. Surveys taken in 2008/2009 have shown the following viewpoint from business customers and users regarding IT services:

- 21 percent of organizations view IT as an “expensive overhead”
- 45 percent view IT as “necessary”
- Only 32 percent see IT as a “valued strategic partner”
- 37 percent feel that “business is constrained by IT”
- Another 14 percent said, “IT is not considered part of business advancement”

This represents a fairly disconcerting reality. However, it is not without merit. Other surveys show that the IT organization in most situations to be fairly dysfunctional:

- 60¢ of every \$1 spent on IT goes toward infrastructure
 - Less than 20 percent manage human capital or worker performance

- 8 out of 10 IT outages are caused by a failed change
 - 70 percent of support calls are “self-inflicted”
- Only about 20 percent of all IT projects are successful
 - 30 percent are cancelled at significant loss, balance not as promised
- 25 percent of hardware and software is never installed
 - 67 percent of IT organizations don’t track software assets
- 90 percent of mid-market IT organizations use manual processes
 - Most IT organizations average 6 standalone IT software tools that do not interoperate with each other

The purpose of this paper is not to disparage the hard-working and dedicated staff found in most IT organizations. Nor is the purpose of this paper to call into question the decision making capability of the businesses funding these IT organizations. However, there is clearly a substantial miscommunication and misunderstanding occurring in today’s IT organizations.

The purpose of ITIL is to present one solution to bridging this gap. ITIL requires the IT organization to work hand in glove with its business to understand business needs. Conversely, it is incumbent upon the business organization to engage with the IT organization in order to properly guide, steer, and fund IT activities. Many business organizations feel that outsourcing is a solution to these issues. It is not. Outsourcing simply moves the entire IT organization or bits and pieces of the IT organization to other providers. Core issues remain. ITIL works equally well for IT service providers supporting a business unit, IT service providers supporting an entire enterprise, or IT service providers that are outsourcers.

Moving from Good to Great in the Pursuit of Competitive Advantage: ITSM to BSM

IT Service Management (ITSM) is the term used to describe managing the workflow and activities within an IT organization. The ITIL is the worldwide de facto ITSM solution. BSM (Business Service Management) is the term used to describe the strategic direction required for ITSM to be successful. Both BSM and ITSM are on the continuum ranging from managing IT resources through managing applications to managing workflow to managing towards business outcomes.

Technology Management

Technology management is usually the first phase of a maturing IT organization. Managing technology usually involves technology silos and organizational autonomy and bias based around the resources required to manage a particular type of technology (for example, networking or software development.) Technology management is focused on technology. It is generally represented with fragmented management views due to its disconnected and technologist nature. This produces an emphasis on resolving IT technical issues. It can also result in redundant investments. The value of investments made in information technology at this technology management stage is generally minimally visible to the business and mostly visible to the IT organization.

Application Management

Application management is generally the natural evolution of the IT organization from a technology point of view to an application point of view. From this perspective, the maturing IT provider begins to consider the fact that it provides applications to its business customers and users. These applications in turn provide value to the enterprise. Application management is an evolution of technology management—slightly more encompassing application silos replace individual technology silos and organizations. Generally, these application silos span several technology silos and even some IT organizational boundaries. Management design focuses on the requirements of the application. This produces a limited integration of management views, and the IT emphasis is on resolving application issues. The primary value of information technology investments at this phase is visible to the business customers and users of the applications.

Business Management

Business management is a primary focus of the ITIL. The goal, simply stated, is to manage IT investments in ways that matter most to the success of the enterprise and its marketplace. Business management is by IT service and business process. It spans all technologies and all organizational boundaries. IT Service Management, focusing on process integration and automation, leads management and design. The primary emphasis of the IT organization is on addressing service issues faced by the business. The value of IT investments at this point becomes clear to the marketplace and is seen by the enterprise as competitive advantage.

How the Structure of the ITIL Promotes Enterprise Success

ITIL presents a structure that describes all common IT activities within the context of a lifecycle. The purpose of the lifecycle metaphor is to make it easy to understand how the various processes and functions described within the ITIL should be used. As a structure, the ITIL has five core topics: Service Operation, Continual Service Improvement, Service Strategy, Service Design, and Service Transition. The purpose of these five competency areas (each one supported by an ITIL volume) is to encapsulate IT Service Management and make it approachable and its benefits attainable.

Service Operation

Service Operation includes all of the activities required to provide the ongoing management support for the IT organization and the services it provides. Service Operation includes some well-known IT activities (for example, the Service Desk, also known as a Help Desk). Also included in Service Operation are Event, Incident, Access, and Problem Management process definitions. This is an excellent example of the ITIL lifecycle approach. Events represent happenings within the infrastructure that are interesting to the IT organization (for example, notifications from systems and so forth). An event may result in an incident—where an incident is defined as an unplanned interruption to an IT service. Access Management considers topics such as rights management for customers and users. Problem Management focuses on the resolution of failures by removing the root cause. Together the core processes spanning the management of the events through to problem resolution represent a lifecycle. The value to the business is a more proactive IT organization. Additionally, the business has a constant source of communication and information about the activities occurring within the IT organization. Providing a central and singular point of contact for all IT services, Service Operation improves business customer and user productivity dramatically. The output of service operation from a lifecycle perspective is service performance reports.

Continual Service Improvement

CSI (Continual Service Improvement) uses the operational metrics produced by Service Operation to consider ways to improve the efficiency, effectiveness, economy, or equity of IT service support and delivery. Working with the business customers and users, IT management translates operational metrics and observations into proposals for improvement. CSI provides and collects input to and from the business and feeds this information into service strategy. This very important function results in a validation with business customers and users about proposals from the IT organization. Before any IT proposal begins consuming significant resources, it is first vetted with the business. If it does not make business sense, the improvement proposal terminates. This critical evaluation prevents waste and can have a significant positive contribution to the effectiveness of IT project management. It also drives business-IT alignment and increases IT transparency. From a lifecycle perspective, the output of CSI is referred to as a SIP (Service Improvement Plan). The SIP moves to Service Strategy for continued definition.

Service Strategy

Service Strategy encapsulates all of the strategic thinking required to analyze CSI proposals. It includes fundamental concepts of Financial and Demand Management, as well as a focus on managing business investments in IT as a portfolio. The concept of Service Portfolio Management aligns very well with the balanced scorecard approach often used in business. Service Strategy considers important topics, such as return on investment. The purpose of Service Strategy is to ensure that the IT organization spends its limited resources in ways that provide the most value for the enterprise. The output of Service Strategy is called an SLP (Service Level Package) that includes the required functionality or utility of the service, and the warranty required to ensure the service meets business requirements.

Service Design

Service Design includes the review of existing capability in the form of service catalogs, Service Level Agreements, and suppliers in order to determine whether the new service as defined in the SLP requires development or may be served by some combination of existing assets. This is a very important and valuable technique that prevents duplication of efforts and hence can reduce costs substantially. Within Service Design, the SLP becomes an SDP (Service Design Package). The SDP includes the specific capacity, availability, continuity, and security requirements needed to meet the utility and warranty specifications developed by CSI and Service Strategy. The SDP also includes instructions for the Service Transition team, which is responsible for transitioning the newer changed IT service into production and handing off control and management to Service Operation.

Service Transition

Service Transition formalizes Change Management in such a way as to accelerate the agility of the organization. The purpose of Service Transition is to move new or changed IT services into production quickly and efficiently, with as minimal interruption to the business as possible. Key activities to ensure this goal is met include managing the release of the change into the infrastructure, as well as managing those service assets required to create configurations that ultimately become IT services. The Service Transition team produces plans and tests to ensure smooth introduction and hand over to Service Operation.

ITIL Benefits

Examples of the success of the ITIL approach are many. Following are just a few example comments and quotes from businesses choosing to pursue ITIL:

- **Centrica:** "IT service delivery costs to fall by \$20 million a year"
- **Oslo Stock Exchange:** "100 percent uptime since 1999"
- **DHL:** "Core ITSM processes implemented in 11 months, achieved 20 percent cost reduction"
- **Avaya:** "Now we manage business services rather than just IT elements: IT costs reduced by 30%"
- **Roche:** "Introduced a consistent global service management process that meets validation requirements"

From an IT operations perspective, the benefits of ITIL include:

- Reductions in complexity
- Effective management of IT assets
- Standardization of services and organization
- Prioritization of IT activities and projects
- Consolidation of duplicate process, technology, and systems
- Optimization of IT spending and control costs
- Compliance with regulations and mandates
- Improved productivity of IT and business
- Enhancement in IT service quality
- Evolving of a service and team approach, managing of vendors, and communicating with customers, between users, and between IT departments
- Management of control and reporting
- Optimization of projects
- Increased agility

By focusing on the attainment of operational excellence within the IT organization, and focusing on what matters most to the business, the result is a win-win situation. The business excels in its marketplace, and the IT organization becomes an integral and valuable contributor to that success.

The combination of the ITIL lifecycle approach produces four key benefits for the business and IT:

1. Meets the changing demands of the business landscape
2. Provides tangible evidence of alignment and value
3. Moves IT beyond the image of a cost center
4. Makes IT an innovator and business enabler

Well-formed IT Service Management initiatives in combination with BSM concepts have allowed many enterprises to excel in their marketplace. One of the most recent and notable is that of Liberty Mutual Group, a North American insurance company. Within a 24-month timeframe, LMG IT investigated issues of customer loyalty and churn. Through ITSM and BSM, LMG realized that ongoing IT maintenance activities traditionally done during "off hours" were negatively affecting investors. On closer study, it turned out that many investors preferred

to manage their portfolio using LMG IT services via the Web on weekends. LMG IT reorganized activities to accommodate end-customers, dramatically improving satisfaction. Over a short period of time, the results were remarkable: LMG announced a \$477 million quarterly revenue increase for Q2/2006. In announcing this amazing increase, Chairman, President, and CEO Edmund F. Kelly said on March 31, 2006: "I am pleased with our financial results in the quarter; revenue growth reflects higher retention of existing accounts and very satisfactory new business growth."

Clearly, the IT focus on the marketplace and end-customer satisfaction instead of the more common technical orientation resulted in resounding success for LMG and for consumers in its marketplace.

Simplified Guide to Achieving Success with ITIL

Success with ITIL does not come overnight or without investment. Perhaps the most important investment is that of commitment—commitment from the business to work with IT, and commitment from IT management to engage with the business and focus on the marketplace.

It is possible to achieve visible and quick improvements in many organizations. These are referred to as "quick wins"—often-egregious situations that may be rectified swiftly through a focused effort. Typically, quick wins from ITIL can be realized within 6 to 9 weeks.

In all cases, the primary obstacle facing adoption and benefit from ITIL is primarily resistance to change. Human beings in general are loath to change how they have learned to do things. Essentially, an effective ITIL implementation is an effective change management program. The key to effective change management from an organizational perspective is to focus on issues that engage everyone, and to engage everyone on that issue.

Simply put, this means starting with strategy and not process or technology. The successful ITIL implementation follows a very specific recipe as described by the ITIL Service Strategy volume and its Service Portfolio Management section, summarized below:

- Define services and validate business case (Service Catalog Management)
- Analyze service value and prioritize to balance demand (Financial and Demand Management)
- Measure quality (CSI, Service Level Management, Supplier Management)
- Authorize and allocate resources (Configuration, Change, SLAs, OLAs, and so forth)

Stage 1: Define Important IT Services in Business Terms

The basic concept is straightforward—to manage by service requires the service be defined. This does not require complete service articulation from enterprise product through to the last bit of IT hardware or software, but rather an understanding of key business processes, business customer and user constituencies, and primary IT services supporting the same. These are referred to as Customer Facing Services and represent those business applications and services critical to the enterprise. They need not be completely defined; however, they must be initially defined for the IT organization to be able to value them.

Stage 2: Value IT Services Based on Risk to the Enterprise

IT service valuation is an important next step. With IT services defined at a high level, it becomes critical to prioritize them relative to each other. Given that IT services represent not only benefit to the organization, but also liabilities and risks, effective IT service valuation is essentially a risk management exercise. Valuing IT services based on the risk they provide to the enterprise provides an objective value achieved working with the business. This value is used to rank services in terms of IT focus. Generally speaking, at this point, the most important services will now be known and agreed to by all.

Stage 3: Measure IT Service Quality and IT Organizational Capability

Following definition and valuation, it becomes critical to measure the quality of IT services. IT service quality cannot be measured from within the IT organization. At best, internal measurements of capacity, availability, and so forth can predict what a user or customer may experience; however, true IT service quality may only be measured subjectively based on customer satisfaction. Measuring quality from external to the organization indicates those services that are not performing as required. The IT manager then turns his or her attention to understanding the capability of the organization for that service. The product of this measurement phase is a gap analysis indicating what is required and what is being delivered. This gap, of course, represents an improvement opportunity—an opportunity defined in business terms, agreed with the business, and of the utmost importance to the success of the enterprise.

Stage 4: Justify IT Service Improvement Projects in Business Terms for Maximum Success

The final phase is the justification of the improvement project in business terms. Every IT improvement program should be instantiated as a formal project. This does not require significant investment in overhead or infrastructure with regard to project management, but rather a focus on a business case. The business case, defined in business terms and with supporting documentation from business stakeholders identified during the definition and valuation and measurement phases, is critical. This process ensures an easily understood document that describes in business terms why the improvement is required and what will happen if the improvement is not achieved. Having a defined beginning and end along with specific goals and objectives, the business case becomes a much stronger document than traditional IT proposals.

Summary

The ITIL provides the guidance required to help business and IT managers overcome substantial obstacles. While ITIL does not stand alone, and in fact requires elements of many quality, project management, risk, and governance frameworks, it does bind these elements together in novel ways that have been proven successful.

Investment in ITIL typically begins with education and training—such as this paper. Following executive commitment, ITIL training progresses to key managers so that they may begin to understand the strategy and cooperation required of them. With the strategy developed, training proceeds to most members of operational staff and some key businesspersons. The result is an organization that understands together what must be achieved together.

A significant investment in tools is often not required for success with ITIL; however, tools that support the capabilities and inter-silo communications ITIL does require are important. For all but the smallest organizations, a comprehensive or integrated IT service management tool system is a requirement.

Benefits may be realized within 6 to 9 weeks when approached as described in this paper. Long-term benefits accrue and continue to accrue. ITIL is not a project; it is a program of change and of continuous improvement.

The benefits of ITIL are many, and well documented. Approaching ITIL presents the enterprise with a chance to reap competitive advantage from its IT investments. From an IT organizational perspective, ITIL creates a more enjoyable workplace, and one with visible contribution to the business of the business.

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