

ITIL – One Step at a Time: A Worry Free Approach to Implementing a Pragmatic ITIL Solution

An ENTERPRISE MANAGEMENT ASSOCIATES® (EMATM) White Paper
Prepared for KACE

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Introduction

The Information Technology Infrastructure Library (ITIL) is the most popularly adopted best practice implementation available today and includes an IT management framework emphasizing management from the perspectives of both the business and IT service consumers. The process of implementing ITIL, however, can be quite daunting to the uninitiated. All too often, organizations miss the opportunity to implement ITIL initiatives due to the perception that they have too small a budget or too few resources. In truth, however, ITIL is specifically designed to reduce costs and improve the performance of existing staff and hardware investments. By utilizing a pragmatic approach to implementing ITIL, significant improvements to an IT infrastructure can be achieved with a quick return on investment, motivated staff involvement, and minimal operational disruption during deployment.

The inherent value in ITIL best practices derives from how they were developed – or, more colorfully, how they evolved. Survival of the best, or fittest, practices is ensured by IT organizations selectively choosing those processes that provide the greatest known benefit, whether measured by profit, reliability or other measures. Over time, the most valuable of these approaches were collected and bundled into the ITIL framework. By utilizing ITIL processes, businesses are leveraging decades of experience from hundreds of successful companies. Where the legacy businesses had to learn through trial and error, organizations can now take advantage of their lessons learned by implementing ITIL.

ITIL represents what the military calls a “force multiplier.” In other words, correctly applying specific ITIL techniques can make the IT organization more effective and efficient by enhancing the productivity of every IT worker. It also stabilizes the infrastructure, and eliminates recurring problems. ITIL means improved efficiency and effectiveness, as can be seen through:

- Improved change and release management, which translates into fewer self-inflicted outages
- Creation of a knowledgebase that diminishes reliance on specific individuals and allows the organization to scale
- Less interruptions from users calling directly into IT for service and support by having a centralized Service Desk
- More efficient utilization of subject matter experts due to less interruption and the use of Incident Management to route tickets to the appropriate resource and watch over tickets to ensure they do not “age”
- Better control over IT asset investments through Configuration Management
- Improvements in infrastructure stability through Problem Management that documents the root-cause of IT incidents, works with Change Management to discover problems, and leverages Configuration Management to maximize performance.

For any ITIL project, it should be kept in mind that the framework is intended to be descriptive, not prescriptive. That is, the ITIL processes do not in themselves provide specific steps for improvements but are designed to be adopted and carefully tuned to meet each individual organizations needs. Thus, the greater the understanding of core business IT requirements, the more effective an ITIL implementation will be at achieving established goals.

The Basics of Pragmatic ITIL

Currently, the most commonly utilized edition of ITIL is version 2, which was released in 2001 and consists of two publications: *Service Support* and *Service Delivery*. One of ITIL's foundational principles is that best practices can and should be used for business benefit. Building on this philosophy, version 3 of ITIL was released in May 2007 and designed to adopt a more lifecycle-oriented approach to service management. Rather than *aligning* business and IT, V3 views service management and business strategy as an *integrated* entity. V3 does not conflict with V2 so existing and ongoing investments based on V2 principles will not lose value as V3 gains widespread use. ITIL V3 also now organizes by lifecycle rather than IT management domain and consists of 5 books: *Service Strategy*, *Service Design*, *Service Transition*, *Service Operation*, and *Continual Service Improvement*. It should be noted that the core elements of IT management process improvement have not changed between V2 and V3 – they have simply been reorganized into a different lifecycle structure. Hence, any discussion of V3 processes will also be applicable to V2 and vice versa.

Many view ITIL as a large and complex framework – and, in fact, it is. However, one of the most important concepts expressed in ITIL is that companies do not need to adopt *everything* in ITIL, and there is no specific order of implementation or set of required processes. The processes described by ITIL are representative of all the activities that successful companies have evolved over many years. ITIL covers every aspect of IT management – from application development to security to engineering. It is imperative that businesses choose just those elements of ITIL that are relevant to their particular situations.

When taking a pragmatic approach to ITIL that ensures value is achieved in each process implementation, a step-by-step methodology should be utilized that phases in new elements and targets them towards the most critical business requirements. With a phased-in approach only one or a few elements are introduced at a time to allow sufficient opportunity for any environment discrepancies to be resolved before continuing on to a new process deployment. Although an overall strategic objective should be established to guide the selection of process improvements, a pragmatic approach will focus on systematically achieving a continuous set of intermediate goals. This method also enables the phasing in of IT budgets so that finances can be effectively reorganized in a way that will not affect business profitability. ITIL philosophy also denotes that new process elements should be targeted to support the needs of the business and prioritized accordingly. Principally, these should be designed to provide services that will resolve acute or chronic pain points and/or to implement new business opportunities. As problems are systematically resolved and profitability increased, system, financial, and staffing resources are freed up to implement new processes. In this way, IT services are continually being improved and expanded in a way that corresponds with the business' need to introduce change.

Success with ITIL framework comes from analyzing the people, process and products in existing IT operations and business environments, and then choosing the minimum set of process descriptions from ITIL. This should not be confused with choosing less ITIL processes than required, however. ITIL is very clear about how to align with businesses to ensure IT does the right things in the right way. ITIL is an agnostic tool, but only the smallest of IT organizations can make use of ITIL ideas and processes without implementing at least some automated tools.

Getting Started

IT managers should begin their ITIL journey by considering which of two main areas are most troublesome: recurring systems failures and reactionary “firefighting;” or an inability to make hardware and/or software changes to the infrastructure without “breaking something else.”

From an ITIL perspective, stability is improved through the operational support and restore processes of Incident Management, Problem Management and the Service Desk Function.

Organizational capabilities are addressed with the operational release and control processes of Change, Release and Configuration Management.

Pragmatic Tailoring of ITIL Methodologies

In most IT organizations, the parts of ITIL that will provide the most immediate return on investment are in the Service Support area. Service Support includes those activities required to install and support infrastructure. As illustrated in Figure 1, ITIL processes include Incident Management, Problem Management, Change Management, Configuration Management, Release Management, and the Service Desk function.

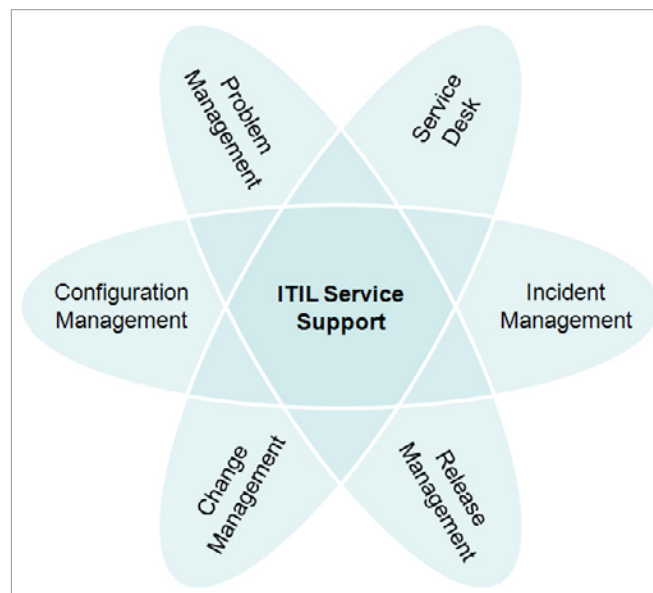


Figure 1: Components of ITIL Service Support

IT organizations are often swamped with trouble tickets and service requests. Since many are also resource constrained, these two concerns are near the top of the list in ITIL interest. ITIL Incident and Problem Management in combination with the Service Desk and systems management tools offer a proven solution. The goal of these processes is to achieve control over the reactive day-to-day processes within IT. By identifying and standardizing how IT staff responds to common requests, more senior IT staff are able to focus on higher value activities without interruption. This allows the people most likely to be able to fix underlying problems to be dedicated to resolving them. Since most calls

into the IT organization result from a common set of underlying problems, finding the root cause and eliminating them is critical. Highly technical resources helping users resolve trivial problems simply allow these underlying problems to persist and fester, generating even more calls into IT.

Implementing an ITIL solution in combination with a good systems management tool captures organizational knowledge, making the least skilled worker at the help or Service Desk able to function at an increased level led by the most skilled. This is simply not possible without strong process control and some form of tool. As more senior technical resources find and eliminate problems from the infrastructure, there are fewer incidents because users experience fewer issues, visibly improving IT service quality.

Clearly, using an ITIL driven tool in the right way can have a dramatically positive impact on service quality, as well as on the overall performance of the workplace. The critical consideration is in determining how best to customize an ITIL process solution for the unique requirements distinct to a particular business. One method of pragmatic customization is to combine a set of processes into centralized functions. For example, initially companies would do well to implement the ITIL recommendation of combining the Configuration, Change and Release management processes into a single activity – a “CCR” function. On the other hand, some processes should never be combined. For example, it is tempting to think that Incident and Problem management can be combined. However, this seldom works and can ultimately lead to failed initiatives.

ITIL has been proven time and time again to deliver real benefits for those organizations that understand its true purpose and nature. The other significant contributor to success is to approach ITIL adoption as a formal IT project.

Approach to Implementation

Many companies are unable to dedicate resources to IT Service Management (ITSM) establishment beyond basic organizational issues. This makes choosing which parts of ITIL to implement very important. There is no “cookbook” within ITIL regarding process adoption, and ITIL implementation is thus different for every organization. While there is no “magic bullet,” there is a well-defined and tested process for choosing the appropriate parts of ITIL for a particular organization. This process is called a service improvement plan, or SIP. The SIP is essentially a project plan and consists of four phases: initiation, planning, execution, and closure.

Whether an organization chooses to hire a consulting firm to carry out the steps, or decides to do it themselves, the activities are identical:

- Initiation starts the project. This step focuses on the “why” and “what” of the project, setting expectations in establishing the scope of the SIP. This is where management commitment is obtained and the scope of the project is beginning to be understood.
- Planning is where detail is assigned to the activities and estimates are made of the time costs and human resources required. This is where it is determined who is going to do what and when. During this step, a work breakdown structure (WBS) is prepared to document the existing manual work being performed. Also during this phase, any new tools required for project completion will be identified.

- Execution is the period during which the plan is carried out. Critical during the execution phase is monitoring to ensure that the results are as expected. During execution, new processes are implemented as well as any tools that may have been identified during the planning phase.
- Closure is an often-overlooked phase of IT projects, but it is critical to success. This is where formal acceptance is achieved, validating the justification and support for the project. Closure is also where many important lessons for the next SIP can be learned, knowing there will be a next SIP because the process of service improvement never ends.

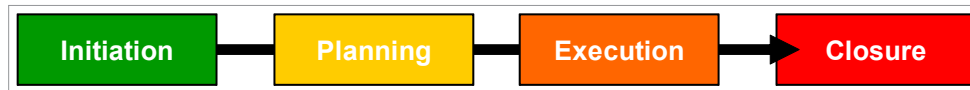


Figure 2: Phases in an ITIL Service Implementation Plan (SIP)

An effective plan for implementing ITIL is to understand the consumers of the work that is being improved. Only once it is understood what the user or customer really needs, can consideration be made about how to fulfill that requirement. Minimum process and workflow requirements need to be established, and existing (usually manual) processes need to be standardized and documented. As workflow documentation accumulates, patterns emerge that will show where the current system is failing.

Anyone that is familiar with ITIL knows that it contains much more descriptive guidance than is covered here. However, the basic elements of the SIP remain the same regardless of the parts of ITIL that are chosen. These small changes accumulate until eventually IT effectiveness improves to the point of visible reductions in “firefighting” and an increase in reliability in the implementation of changes. The “free time” achieved from these process activities may then be utilized to solve deeper technical issues and proactively improve the IT infrastructure.

Of course, using a tool makes these tasks much easier. Combining selectively applied ITIL process with an appliance or software tool specifically designed to accommodate such activities often results in dramatic “quick wins.” Through these quick wins, IT demonstrates improvements to business systems that reduces downtime and provides higher quality service and support. Another benefit is an improvement in IT working conditions that can lead to reduced staff turnover.

An Enterprise Buying Guide for Implementing ITIL

The Value of Commercial Systems Management Solutions to ITIL Management

Understanding best practice approaches like ITIL is only half the battle to actually achieving success with those established processes. How those processes are actually implemented in an IT infrastructure is at least as critical. An inappropriate or incomplete deployment can be counter-productive to effective IT management. This is particularly true for businesses demanding IT agility but that lack the extensive tools, personnel and resources to implement new practices in IT environments that are increasing in both complexity and business utilization.

Centralized automated enterprise-wide systems management tools that are ITIL focused simplify the process of collecting detailed infrastructure data, analyzing the data for potential problems, reporting issues to critical personnel and facilitating true root cause analysis for problem prevention and remediation – and they do so in a manner consistent with the best practices outlined in ITIL. For IT managers intent on ITIL deployment, the question is not whether to purchase tools to assist in the process, but which tools to purchase.

Determining the Most Important Features

All businesses are challenged to ensure value in their IT investments and need to be diligent on ensuring they get the most “bang for their buck” in IT purchases. The key to effectively balancing cost with functionality is having an understating of what features best achieve ITIL implementation goals outlined in a SIP. For instance, large IT implementations are inherently complex and, as such, particularly susceptible to systemic infrastructure failures. In many cases, IT support personnel are unable to resolve the root cause of these problems because they spend the bulk of their time putting band-aids on the recurring failures. To end the break/fix cycle of reactive “firefighting” organizations should look for solutions that include both granular configuration data collection and change detection functionality that enables identification of problems before they occur. With this information, baseline policies can be created to standardize configurations and stabilize the infrastructure. By enabling this proactive problem prevention, IT staffs are freed up to improve IT conditions so they will achieve business requirements and meet Service Level Agreements (SLAs).

High availability environments that find it difficult to make changes to their infrastructure due to the impacts they could have on the business need to look for solutions that minimize complexity and intrusiveness on the infrastructure. Also, organizations with limited staff will want a solution that is simple to use to ease the necessity for training and ongoing administration, decrease the risk of knowledge loss due to attrition, and maximize the performance of even the least skilled worker.

Choosing a Solution that Meets the Business Model

Once ITIL implementation goals have been determined, indicating the features necessary in a systems management solution for successful implementation, a look at the business model should also be considered to ensure long-term viability of the product. For instance, many businesses combine IT support responsibilities into a single or a few support team(s). These businesses will want to invest in a single, centralized package that can support all IT requirements, to prevent “swivel-chair administration” that occurs when multiple disparate tools are employed.

Certainly, cost must be considered here, but, as previously mentioned, it needs to be balanced with the expected return on investment from the tool. Large expensive solutions may include all the tools necessary to achieve ITIL success, but if a significant portion of the included tools is not utilized or too complicated to deploy, the business is not receiving the best value for its expenditure. Conversely, “point products,” or those designed for only a few specific purposes, will likely not scale to grow with the business. The old adage of “buy what can be afforded, but no more than is needed” is an appropriate rule to keep in mind. Figure 3 below provides a general guide for determining a solution that will effectively meet IT business needs for achieving ITIL.

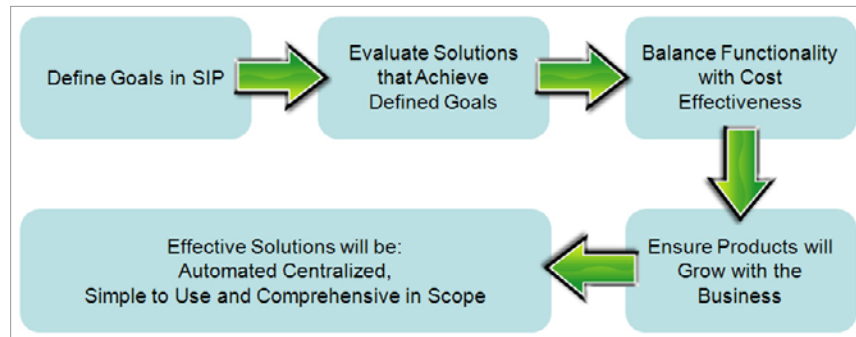


Figure 3: Considerations in choosing tools to assist in ITIL Implementation

Supporting ITIL Implementations with KBOX™ from KACE™

As an example, KACE has specifically architected its KBOX Systems Management Appliance solutions to facilitate pragmatic ITIL implementations. Fulfilling all the common enterprise requirements outlined above, KBOX from KACE provides a centralized systems management solution that automates the collection of data, the identification of problems, and the reporting of IT status information to achieve a practical ITIL approach to incident, problem, and configuration management.

KACE offers two implementations of the KBOX. The first is the KBOX Systems Deployment Appliance, which standardizes and simplifies the process of deploying operating systems and applications customized to achieve business requirements. In this way, ITIL processes can be implemented in new environments or maintained on expanding environments according to pre-defined configuration standards, assuring consistency across the infrastructure. Restoration of the environment is also facilitated by providing the ability to automatically recover to a baselined condition.

KACE also offers the KBOX Systems Management Appliance, which continues support for ITIL modeled IT management processes throughout a systems lifecycle. Hardware and software configurations are collected and stored, satisfying the requirements in the ITIL Service Transition module for configuration management. Assets can not only be tracked and managed with this solution, but the inventory dependencies incorporated into the KBOX database acts as a CMDB facilitating rapid and efficient incident management across the IT support infrastructure. Alert functionality is configurable to ensure prompt notification of changes to the environment that drift outside of pre-determined configuration standards. Policy enforcement using configuration and patch management, application virtualization and software deployment simplifies and accelerates the entire ITIL Service Transition process (Change, Configuration and Release Management) by automating implementation based on pre-defined configurations, and reporting functionality provides the validation of success necessary to achieve closure on each implemented SIP.

Recent enhancements to the KBOX Systems Management Appliance Help Desk Module have extended its ability to meet ITIL Service Desk requirements for ticketing submission, tracking and management functionality as outlined in ITIL's Service Operation book. KACE has enabled the creation of fully customizable rule sets they refer to as "queues" (not to be confused with static ticketing queues). The

KBOX queues are used to define what types of information will be acquired for each specific IT support task to meet incident and problem management requirements. They can also be used to track and issue approvals for tasks and to restrict the visibility of sensitive data. Additionally, tickets can be placed in a hierarchical structure to create parent/child relationships between tasks. Automated tracking of help desk performance is provided, addressing requirements for ITIL V3 Process Improvement. A client-side “User Portal” is also included for issuing tickets, knowledgebase access, and performing software downloads.

The balance of broad functionality and cost-effectiveness makes this solution attractive to organizations of all sizes. KBOX from KACE provides the automated tools most applicable to achieve pragmatic ITIL success, and assists multi-function IT support groups by providing a centralized common interface for all the applicable tools. And with pricing as low as 30% of the cost of software-only systems management solutions (as determined by ENTERPRISE MANAGEMENT ASSOCIATES[®] (EMA[™]) analysts in a lifecycle management product evaluation), the KBOX from KACE certainly achieves affordability. With KBOX from KACE, businesses are able to achieve ITIL compliance simply, effectively and inexpensively.

EMA Perspective

Primary EMA research has indicated that 61% of all businesses that have adopted best practices have implemented ITIL. ITIL includes several advantages to justify its popularity including a widely understandable and agreed-upon terminology, a comprehensive coverage of IT service delivery and support, its maturity, and its proven effectiveness. EMA recommends most businesses review and implement the best practices associated with ITIL as a way to streamline their IT support and to increase their profitability.

Vendors providing ITIL-oriented solutions should be encouraged by growth in this market and should specifically consider development to facilitate a pragmatic ITIL approach. Doing this will involve balancing cost and functionality to maximize the value of the products to address ITIL processes. Organizations of all sizes need innovative tools that enhance the understanding of an IT environment, optimize IT resources, and reduce infrastructure costs by enabling IT personnel to proactively identify, resolve and prevent problems rather than reactively “firefight” incidents when they occur. A note of caution, however, for businesses seeking value-based solutions – cost should not be the sole consideration. Allowances need to be made for the potential of business growth, and a solution should be chosen that not only satisfies the needs of today, but also the expected needs of tomorrow.

If ITIL is the road to IT management success, then automated systems management solutions are the vehicles that transport businesses on it. Businesses of all sizes can travel on this highway with confidence knowing that solutions, like the KBOX from KACE, enable a journey towards operational effectiveness and profitability.

About KACE

KACE[™] is a leading systems management appliance company. The award winning KBOX[™] family of appliances delivers easy-to-use, comprehensive systems management capabilities. KACE customers usually install in one day at the lowest total cost compared to software alternatives. KACE is headquartered in Mountain View, California. To learn more about KACE and its product offerings, please visit <http://www.kace.com> or call 1-877-MGMT-DONE, or (+1) 650 316-1050 for international inquiries.

About Enterprise Management Associates, Inc.

Founded in 1996, Enterprise Management Associates (EMA) is a leading industry analyst firm that specializes in going “beyond the surface” to provide deep insight across the full spectrum of IT management technologies. EMA analysts leverage a unique combination of practical experience, insight into industry best practices, and in-depth knowledge of current and planned vendor solutions to help its clients achieve their goals. Learn more about EMA research, analysis, and consulting services for enterprise IT professionals and IT vendors at www.enterprisemanagement.com or follow [EMA on Twitter](#).

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