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# How to Gain Better Operational Leverage Through Enhanced Process Maturity

Invisible and rogue activities, as well as a preponderance of manual tasks, transform good operations into poor ones. Here's a look at how more consistent process discipline can reduce expenditures and enable a more effective IT infrastructure.

By Ryan W. Marquiss

The recent economic downturn has forced almost every IT organization to rethink its operational approach. IT departments once asked to do more with less are now forced to do more with very little.

Senior IT leadership understands both the cautious and opportunistic nature of the current market and rightfully wants to capitalize on new innovations wherever possible. They also realize the uphill challenge of achieving strategic initiatives by demanding more of existing personnel, operational systems and infrastructure. It is no longer good enough to have a plan; leaders must ensure that their plans provide magic -- the ability to stun onlookers with seemingly impossible feats.

The question is, how is this magic accomplished, and with what. The answer lies in choosing innovative ways to improve operational maturity and reduce costs, all while creating new opportunities for additional revenue streams.

## Reaching for the Clouds

Many senior leaders searching for innovation are turning to technology that provides higher density, high-efficiency computing; expanded virtualization capabilities; and cutting-edge, eco-friendly infrastructure solutions. At the forefront is the emergence of on-demand computing, known as cloud computing in its current iteration.

Cloud computing is enticing because it converts workloads from physical machines residing in a company data center into off-site virtual machines occupying resources in a shared pool. Theoretically, these pools are massive in scale and promote the efficient use of underlying hardware in ways that appear to expand resources to an almost infinite horizon. In practice, all physical resource pools have limits, but application deployments can be aggregated across pools to overcome these capacity constraints.

Applications that are cloud-aware typically separate data from execution and have massively scalable architectures that allow for a quick response to increases in demand. This allows the overall system to spin additional capacity up or down based upon demand spikes.

Most cloud computing providers couple systems to automate and manage the full workload lifecycle and charge users a fee based on actual resource usage of active workloads. The amount charged per workload depends on actual demand for the workload resources that can be easily dialed up or down, respectively. Thus the "cloud" becomes a one-stop shop for transforming traditional infrastructure capital expense (CapEx) into monthly operational expense (OpEx), as workloads are now demand-driven, similar to how electric power, telephones and personnel are made available on-demand.

## Not as Simple as it Seems

However, cloud computing by itself is not the answer. Cloud-enabled services will not provide the necessary benefits to further drive an organization's strategic initiatives without thoughtful planning, proper application and fine-tuning.

In fact, many organizations will not realize the capital savings enabled by advanced technology like cloud computing because they lack the operational maturity or IT Service Management (ITSM) capabilities to do so. What's worse, many organizations will not realize this until they have invested large sums of capital into cloud or other advanced computing initiatives. The result: Their ability to change and gain the benefits of these new services will be restrained by their own operational approaches and processes. As such, the initial focus question of, "What can I do to create magic" should really be, "Why is my current approach not working?"

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Therefore, it is necessary for senior leaders to review their companies' IT operational processes and organizational discipline. This adds yet another question that must be resolved, however: "Why do better, more consistent processes and operational discipline keep OpEx costs down and leave more cash on the table to fuel strategic initiatives?" The answer will provide organizations with the necessary understanding and momentum needed to convert technology approaches like cloud from a novel concept into a strategic reality with quantifiable business benefits.

Many organizations may experience, but not correctly identify, the common pitfalls that prevent success. They may be operating with these issues and not even know it. Therefore, an exploration of what can go wrong, as well as a discussion of the ways to ensure operational excellence, is critical before moving forward.

## How Not to Succeed

Operational processes determine the approach an IT organization will take to anticipate, act and react to situations posed in daily IT activities. Processes that do not provide proper guidance waste money that could be better used for funding new initiatives. For example, an operational process that provisions storage automatically with no indication of purpose, timeframe or capacity reuse wastes valuable capital. For instance, we have observed some client processes that over-allocate storage into the 100-plus terabyte range, which costs the organization tens of thousands of dollars in infrastructure alone. This is a process problem, as valuable capital is locked away in physical, tangible devices.

Wasteful spending becomes overhead to an organization, as it consumes valuable resources and budgetary dollars and may not be directly reflected in standard total cost of ownership (TCO) metrics used throughout the data center. TCO assessments are often populated with only tangible and intangible items within the data center and not the glue that holds the data center universe together. This is because it is very hard to quantify the small cost differential a process can contribute to the bottom line. In the previous example, how is the storage provisioning process component represented in overall TCO? It is typically represented through the actual storage device count, but these are just artifacts of the process and symptoms of the problem. The process itself -- because it is an amplifier -- plays a major role in either enhancing or detracting from organizational TCO.

In addition to the poorly quantifiable, ineffective processes like the one discussed above, rogue processes can also develop over time through lack of discipline in the IT organization. Ineffective or manual processes slowly drain company coffers of valuable capital and rob employee morale, as individuals struggle to make the best of what processes they have available. Worse yet, employees may begin to create their own unofficial workarounds to circumvent ineffective processes. Ineffective processes, invisible activities and rogue processes all erode good operations into poor ones.

By understanding the perils of what not to do, organizations can then move forward with plans that drive IT operational excellence, improve operational maturity and promote better IT service management.

These rogue and misaligned processes become the status quo for organizations as they quickly become tightly integrated into day-to-day operations. This *steady* state remains steady and does not optimize over time. Thus it begins to degrade IT operations, as the organization is not evolving and starts to lose its competitive advantage.

It is at this point that many organizations look to external providers for help, but in asking for assistance, they may also identify the inability of the team to understand and resolve these problems on their own. Therefore, IT organizations may continue to support the business-as-usual (BAU) processes that were barely good enough for yesterday's operations. (See Figure 1 for Cognizant's approach to process maturity improvement.)

## How to Succeed

By understanding the perils of what not to do, organizations can then move forward with plans that drive IT operational excellence, improve operational maturity and promote better IT service management. While misaligned processes can contribute to poor operation, properly aligned processes can minimize wasteful overhead and solidify the glue that holds operations together. The alignment of process to business need, and technology to process, is focused on enhancing operational execution. Maturity can be defined as the advancement or decline of the ability to perform, including operational execution. Continually improving

### Operations Maturity – Process Definition Implementation & Compliance

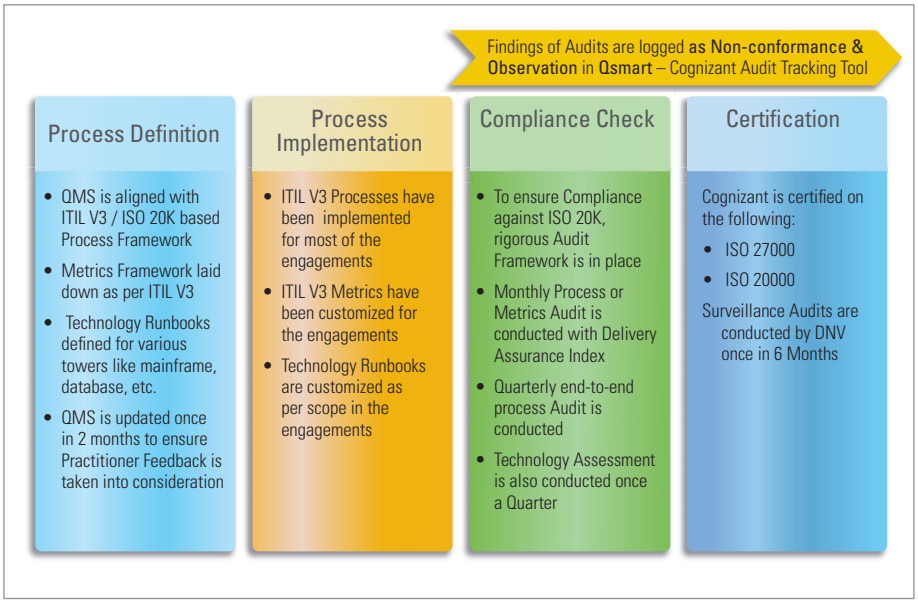


FIGURE 1

operations over time based upon proven best practices and knowledge distilled from ITIL is the key to advancing maturity. As maturity prospers, organizations often look to automation. As Microsoft founder Bill Gates has stated[1]:

*"The first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency. The second is that automation applied to an inefficient operation will magnify the inefficiency."*

Operational execution, supported by associated processes, is the key to reducing or eliminating unnecessary manual tasks that waste resources. Automating these tasks has two main benefits. First, it can reduce the number of personnel required for BAU by eliminating manual labor and reducing the amount of time required to service a particular process. Second, it prepares the organization for the very technological initiatives the company is looking to adopt, such as cloud computing. Therefore, it helps to further reclaim the cash hidden in the operational book margins by reevaluating these poor processes systematically, and it can free financial resources through automation for subsequent process improvements and future deployments of advanced technology.

For example, we helped a large European logistics company achieve better operational execution by systematically reviewing and improving operational processes over time. This allowed the company to achieve 99.97% availability, improve its service quality and free the in-house IT team to focus on strategic initiatives. This is evidence that process maturity contributes to operational excellence, and better execution contributes to improved maturity.

## Efficiency vs. Effectiveness

When process automation is considered a first step toward enabling more mature operations, efficiency is often the first topic on the minds of many large organizations. They immediately see efficiency as the only true hallmark of proper operational execution. However, this may not always be the best approach. The reason: There is a difference between efficiency and effectiveness. Failing to differentiate between these two similar terms can rob organizations of precious capital and further delay critical strategic initiatives.

Efficiency can be defined as the ability to perform a single task in the best, most economical way, such as the most efficient way to machine a part, answer the phone, send an email or deploy a virtual machine. However, using efficiency as the only measure of success is limiting and even detrimental. For example, the most efficient way to deploy a virtual machine may be from a template. While this approach saves many man-hours vs. continually recreating the machine image manually, it does not answer an important question: "Does a virtual machine need to be created to solve this problem?"

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This is where effectiveness comes into play. Effectiveness can be defined as the ability to apply the correct solution to a given problem. In the previous example, effectiveness may be better achieved by deploying the workload onto another host, thereby stacking like applications together. It is entirely possible to implement an incredibly efficient version of the completely wrong solution, and many organizations waste value capital improving what should be removed.

It should be noted that this is not a one-or-the-other scenario. Best-selling author Timothy Ferriss, author of *The 4-Hour Workweek*, notes that many activities are time wasters that need to be eliminated before any system automation can be applied.[2] Therefore, it is more important to be effective first, before being efficient. An organization applying automation will amplify the differential cost savings only when the right processes are being automated. From the previous example, automating storage provisioning prior to correcting a poor storage process will only expedite the rate of waste. Fixing this process prior to automation will increase the net savings.

## Enabling Long-Term Success

Why do better, more consistent processes and operational discipline keep OpEx costs down and leave more cash on the table to fuel strategic initiatives? While not exhaustive, this article serves as a starting point to answering that question. Organizations that reassess how they apply ITSM techniques to improve their operational maturity can better utilize their IT infrastructure and further

## Enabling IT Process Maturity

Cognizant tracks the degree of operational improvement using a proprietary Operations Maturity Index (OMI) that makes remote infrastructure management (RIM) both scientific and ITIL metrics-driven. The OMI, which includes regular process audits, measures how well operations maturity has improved over time using our ITIL-based, RIM services.

OMI is built on three principles, each carrying different weight:

- **Delivery maturity (50%):** Tracks key project performance parameters, such as service-level agreement (SLA) and process compliance. It focuses on the maturity level of the delivery of multiple technologies within a single customer engagement.
- **Technology maturity (30%):** Measures the implementation maturity of each technology from a service delivery perspective across multiple customers. It factors in 14 parameters related to problem resolution, problem management and knowledge management to monitor operations and enable improvements.
- **Automation maturity (20%):** Measured on a monthly basis, this component evaluates the maturity of service automation, based on workflow management using ITIL processes, service-level management and task automation -- particularly the automation of repetitive tasks.

As these indicators improve, service delivery and service capability improves, assuring IT Service Management excellence.

fund their strategic business initiatives. This business synergy provides the additional leverage that organizations seek to improve their bottom lines.

A well-reviewed and properly devised process playbook, coupled with devotion to accepting only the best from operational processes, is the foundation of long-term success. The identification of these wasted funds will provide the fuel to continue funding strategic initiatives. Additionally, organizations need to anticipate and implement the necessary governing processes early on to better align them with long-term strategic IT initiatives.

To truly capitalize on process gains as the economy improves, the cost-savings from process ideation must be reinvested into the organization. This "free" fuel will continue to pay dividends, as the organization can continue to grow and achieve its strategic goals, advancing its quest toward operational excellence. When prioritized, these enhancements can ensure the best path for the organization and produce an agile operation that optimizes return on investment in technology. Ultimately, it is this technological enablement through process that can help contain OpEx.

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*Footnotes*

[1] "Bill Gates - Master of Business." September 1, 2009 <http://www.billgatesmicrosoft.com/>

[2] Ferriss, Timothy, *The 4-Hour Workweek: Escape 9-5, Live Anywhere, and Join the New Rich.* New York: Crown, 2007.