

SERVICE LEVEL MANAGEMENT

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Abstract

Over the years, organizations have transitioned from a world dominated by physical processes and activities to a world in which business processes — or entire business models — exist within the virtual walls of IT systems. Because the integration of technology and process creates competitive advantages for businesses, these virtualized business processes have become the lifeblood of organizations. As a result, providing a collection of robust, quality-driven IT services to support business process is imperative. At the core of these services is the concept of service level management and service level agreements. Service level management is the mechanism that IT organizations use to ensure that IT services are aligned to business needs and are provided in an effective, high-quality manner. This paper examines the drivers behind the importance of service level management and explores the true meaning of service level agreements.

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Three simple rules for service level management

Rule 1 – A service is not a server

An IT service is a collection of IT capabilities and resources that support a business process. A server is just part of what makes a service work.

Rule 2 – Monitor things the business cares about

When monitoring SLAs, make sure to measure and monitor what the business really cares about. If you don't, you risk missing the big point.

Rule 3 – Get agreement on SLAs

Agreement is what makes SLAs work. Agreement happens within the business and within IT.

The Driver of Service Level Management: Vitalized Business Processes

In 1995, Jeffrey Rayport and John Sviokla wrote an article in the Harvard Business Review titled “Exploiting the Virtual Value Chain” that examines how organizations are transitioning from a world of physical value chains — the series of physical activities that connect customers to products — to a world that leverages virtual value chains through the virtualization of physical processes and activities.

In the article, Rayport and Sviokla asserted that organizations utilize virtual value chains in a progression made up of three stages. In the first stage, organizations use the virtual world to gain visibility, or to see their physical operations, allowing managers to better monitor operations and advance levels of quality and operations management. In the second stage, after gaining visibility, organizations begin to mirror the capabilities of their physical world with virtual capabilities. This mirroring allows organizations to run their operations with more agility, flexibility, and quality while minimizing cost. In the final stage, organizations are able to create new customer relationships that only exist in the virtual world. These new relationships drive increased customer loyalty, generate new revenue streams, and create competitive advantage for organizations.

So why this discussion of value chains at the beginning of a paper on service level management?

Rayport and Sviokla described several uses of technology that in 1995 were absolutely cutting-edge but are commonplace today. A mere 12 years later, organizations have embraced the virtualization of business processes at a rate that likely would be alarming to the authors — a variant of Moore's Law is in full effect here. Today's reality is that most organizations cannot exist without the IT systems that support their virtualized business processes.

Also, the article made the point that the first use of virtualization is to monitor the physical world. But who monitors the virtual world? This question is at the root of why service level management — along with the alignment of business — and IT have been such popular topics in recent years.

What is Moore's Law?

More than 40 years ago, Electronics magazine asked Gordon Moore to write an article summarizing the state of the electronics industry.

The article outlined what became known as Moore's Law, the observation that the number of transistors on a chip can be doubled in a short period of time. Adopted as a yardstick by the tech industry, the concept is one of the reasons the industry evolved into a high-growth, but high-risk, affair.

With such a dependence on IT systems and virtualized business processes, IT is the modern-day factory supporting the operations of an organization. In our physical factories, we have developed extensive controls, for example, total quality management and implemented the management principals of philosophers, such as William Edwards Deming, to increase quality and simultaneously reduce costs. But in the virtual world, how do we monitor and enforce quality? How do we know that our virtual worlds are running the way they should be?

This is why it is imperative that IT organizations develop and provide services that fully support these virtualized business processes with the proper levels of quality. To do so, the IT organization must understand exactly what the critical business processes are and what IT services are required to support them.

The quandary is that Moore's Law does not just apply to computer hardware; it also applies to the speed at which business processes change. If IT organizations do not understand this point, they will always be supporting antiquated systems that are not driving the next product, the next new customer, or the next innovation. This is why the concept of service level management is so important. Service level management is the mechanism that allows IT to understand these dynamics and properly deploy resources to support the business.

What Is Service Level Management?

For the purpose of this paper, service level management is the *process by which an organization identifies and agrees on the level of IT service needed to support the business and defines a mechanism to monitor the identified service levels to see that they are being achieved*. Within the service level management process, organizations typically use service level agreements (SLAs) to define specifically what a service is, to define the level at which it must be provided, and to gain agreement with all parties on the desired result.

There have been many books and articles written about service level management and SLAs. A good addition to the discussion of service level management and SLA best practices comes from exploring the meaning behind the term "service level agreements." Because good SLAs are critical to effective service level management, it's important to examine what is really meant by the words service, level, and agreement and discuss best practices that organizations should consider in implementing their SLAs.

The S, L, and A of Service Level Agreement

S — Service

A service, within the context of an SLA, is collection of IT capabilities that combine to make a business process possible. The service is used by the end user in the business to support the user's job or the objectives of the organization. It is not a specific IT thing, rather it is a collection of IT resources that make a business process possible.

For example, email is a service that is offered to the business to support various communications functions. It makes business communications possible in the modern world and underpins a majority of business transactions. The service is comprised of hardware, software, networking, end-points, training, and support, all of which helps allow the business to effectively communicate internally and externally. Many of the components that comprise the service — like network infrastructure — are shared across multiple services. However, the individual components are not a service in themselves. Rather, each is just one of many parts that comprise the service.

When defining a service it is critical to understand and define the service in the context of the business process it is supporting. By defining a service from the business-use perspective, the SLA will be more relevant and will help ensure that the service provided supports the current and future needs of the business.

L — Level

The level in an SLA defines the specifics or performance criteria of how a service is delivered and should behave. The details of level are very important because they define how to measure and manage the service and ensure that the service delivered is actually facilitating the business.

Continuing with the email example, a level for email can include the size of an email inbox or the maximum time for delivering a message. When defining levels, it is critical to consider the needs of the business user. If these needs are not considered, organizations risk misaligning the service with the business need. Quality discussions with business users will help in defining meaningful level requirements.

IT organizations tend to define level in terms of things that can be easily measured, such as server uptime or application response time. While system availability is a concern to business users, IT-centric metrics are only part of what makes a service meaningful to the business. IT organizations need to challenge themselves to identify the elements of level that are the essence of what makes a service meaningful to the business.

A — Agreement

The agreement in an SLA happens when business users and IT concur that the service and the level at which it is provided meet a business need. With agreement, IT organizations can make definitive decisions on architecture, support models, and deployment. Agreement allows business users to assess and plan for the timing, volume, and effectiveness of their processes. Most importantly, agreement makes the IT services relevant and aligned to the needs of the business.

As mentioned previously, organizations are rapidly evolving from a world based on physical processes to one based on virtual processes. If the business is going to have confidence in implementing these changes to the virtual business processes, agreement on service and the way it supports the business will be key. Agreement gives the business confidence that the service will support the business and key processes, with controls in place to ensure that their new virtual factories will be stable, quality-driven resources for the long term.

Conclusion

As organizations continue to change and morph their business models, more and more business processes will begin to exist solely based on the capacities of IT's virtual world. For organizations to have confidence in these new virtual processes, the business users and the IT organization will have to form strong bonds and agreements on how their two worlds should work together. Service level management and well-crafted SLAs will be key enablers for this process — making IT actions highly relevant to the business users and giving business managers the confidence they need to fully exploit the benefits of virtual business models.

