

Point of View

Next-Generation Managed Services:

A Window of Opportunity for Service Providers

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A managed service is defined as the remote management of information technology to support a business customer's processes. A managed service typically contains the following characteristics: remote provisioning and trouble management, remote monitoring of all solution elements, detailed service-level agreements, and contracts that extend beyond one year.

Introduction

Growing at 20 percent annually, managed services is one of the fastest-growing sectors for service providers (SPs).¹ Often relegated to supporting commodity "dumb pipes" (also known as "unintelligent networks") and simple services by systems integrators, SPs need a way to increase their value-add, define a differentiated role that emphasizes solutions rather than commodity services, and reap the benefits of higher margins.

Next-generation managed services provide SPs a platform on which to expand their business models to include higher-order services that achieve greater margins and realize business goals. Industry analysts estimate that the entire managed services market (which comprises the network, computer, and application layers) will be driven by advanced managed services within the computing and application layers and will exceed US\$60 billion by 2010. Getting there, however, will not be simple. Service providers must navigate the pitfalls of history and mitigate the efforts of competitors. If SPs can learn from the past and influence the future, they will profit from next-generation managed services for years to come.

This Point of View, by the Cisco[®] Internet Business Solutions Group (IBSG), introduces a new managed services concept and hierarchy, providing a comprehensive map of the current market to encourage SPs to think beyond traditional managed services and the role they play in the world of next-generation managed services.

Lessons from the Past

We've heard the next-generation managed services story before: In the late 1990s, a torrent of venture capital flowed to esoteric companies such as Corio, Interliant, and USinternetworking. Due to the dot-com bust, these companies could no longer operate independently and were acquired by IBM, NaviSite, and AT&T, respectively. At the same time, other small players went bankrupt. Why should we think that history is not destined to repeat itself?

 [&]quot;The Market for Video Products—Live Streaming, On-Demand Streaming, and Video/Web Conferencing 2005–2010," IDC (customer report for Cisco), March 12, 2006.

First, in nearly 10 years since the dot-com bust, advances in technology have emerged (Web 2.0 is one example); network infrastructure is more robust and intelligent, enabling higher reliability and quality; applications are modular (service-oriented architecture) for improved web delivery and remote management; computing and customer premises equipment (CPE) is designed better for remote management; and solution architectures have improved the balance between standardization and customization.

Second, customer experiences and expectations have continued to evolve: the web, a new and mysterious phenomenon of the late 20th century, became an integral component of the enterprise business model in 2008. In addition, today's business models and contracts are more standardized. IT outsourcing, which was novel in the 1990s, is not only commonplace today, but also a foundational component in lowering operations costs.

Finally, business models for some companies were fundamentally flawed because they attempted to provide custom applications with traditional licensing arrangements. High degrees of customization demanded excessive engineering charges for setup (nonrecurring engineering) and significant staff for operations support. These costs were recouped only if the customer remained for a significant period, usually more than three years. Arrangements for licenses, on the other hand, were for much shorter periods, usually one year or less. Each additional customer resulted in a financial loss for the SP over the length of their partnership.

Today, SPs can balance the need for customization better with the need for standardization. In addition, business models are more aligned with the value that SPs provide.

In short, the world is different from the time of the dot-com bubble. The time for nextgeneration managed services is now—technology has caught up, customers want outsourced solutions, and business models have matured.

Next-Generation Managed Services Landscape

Often considered part of the network layer only, managed services span the entire solutions space. Loosely based on the Open Systems Interconnection (OSI) hierarchy—the base architecture for IT—next-generation managed services are managed remotely and are classified according to the following layers:

Application-managed services: Application-managed services deal with user and enterprise applications or associated business processes. These services reside at the edge of the network or in the network cloud and include Software as a Service (SaaS) and IT.

Computing- and CPE-managed services: Computing- and CPE-managed services deal with desktop and enterprise computing or other electronic infrastructure. These services reside at the edge of the network and include backup, network storage, and innovative offerings such as digital signage.

Network-based managed services: Network-based managed services deal with WAN or LAN infrastructures or services. These services are traditional and often considered as managed network services that include VPN, voice over IP, and security.

Figure 1 delineates the next-generation managed services hierarchy.

| Description | Solutions | | |
|--|---|--|--|
| Application-Based Managed Services | SaaS (e.g. CRM) | | |
| Services that are managed remotely and related to user or enterprise applications, or to associated business processes | IT Managed Remotely Managed Hosting Emerging Collaboration | | |
| Computing-/CPE-Based Managed Services | Cisco TelePresence [™] Systems Digital Signage Home Control Backup Services | | |
| Services that are managed remotely and related to desktop or enterprise computing, or to other electronic infrastructure | | | |
| | Managed Unified | | |
| Network-/Communications-Based Managed Service | s Managed VPN | | |
| Services that are managed remotely and related to WAN or LAN infrastructure or services | VoIP Services Managed Firewall Intrusion Detection | | |

Figure 1. Managed Services Hierarchy from Layer 1 (bottom) to Layer 3 (top)

Source: "Next-Generation Managed Services: Winning Strategies for Network Service Providers," Cisco IBSG, October 2008

As Figure 1 illustrates, next-generation managed services consist of a continuum of services rather than as compartmentalized service packages. Moreover, next-generation managed services are rarely a single service, but rather solutions designed specifically for end-customer processes. Therefore, most solutions include elements from all subtending layers to create a standalone service. Figure 1 shows, for example, that while network-based managed services (Layer 1) such as firewalls are sold independently, computer-based services (Layer 2) such as web hosting are sold with CPE bundled with the network's elements.

Figure 1 also illustrates that each service contains a group of solutions. In general, a customer primarily buys or interacts with one of these solutions. In reality, however, the customer is buying the highest level of the service. That is, if customers buy a computer-based managed service and back up data to their hard drive, they are using both the service's storage solution and its network solution to deliver data. In another example, when customers buy SaaS, they also buy both bandwidth within the network layer and access to the application.

In reality, next-generation managed services do not fit seamlessly into a particular framework. As technology improves, many current and new services require the convergence of networks, computers, and applications. Innovative services such as managed unified communications (which reside in the network and computing layers) or managed hosting (which occupies the computing and applications layers) sit between the rigid demarcations of the framework.

Next-generation managed services focus on solutions that consist of all layers of the managed services hierarchy. Higher layers provide differentiation and increased margins; lower levels provide end-to-end visibility and support. Combining all layers creates a situation in which customer churn is less likely to occur and a differentiated solution that enables SPs to provide additional value to business customers.

Market Opportunity for Service Providers

Rapid growth of SaaS and Infrastructure as a Service (IaaS), as well as advanced collaboration technology, drive demand for next-generation managed services. More important, applications and infrastructure solutions rarely, if ever, are sold alone; almost all require an abundance of network-based services to be complete—good news for SPs.

Nearly every next-generation managed service will pull through a significant amount of network-based managed services. In most cases, the value of the network-based components will be equal to or greater than CPE and applications-based components. With SaaS and cloud-based computing services growing at more than 25 percent annually,² and with customers preferring to purchase services instead of infrastructures, the managed services market is expected to grow 20 percent³ by 2010; most of this growth will exist in network-based services, which are needed for all next-generation managed services. Growth rates are further detailed in Figure 2.



Figure 2. Global Managed Services Growth Rates

Source: "Next-Generation Managed Services: Winning Strategies for Network Service Providers," Cisco IBSG, October 2008. Additional analysis provided by Datamonitor; IDC; Frost & Sullivan; Forrester Research; and Gartner, Inc.

^{2. &}quot;The Cloud Wars: \$100+Billion at Stake," Merril Lynch, May 7, 2008.

^{3.} Analysis provided by Cisco IBSG; Datamonitor; IDC; Frost & Sullivan; Forrester Research; and Gartner, Inc.

Creating a New Role for Service Providers

Service providers have the opportunity to change not only the services they sell, but also the way they sell them. The market for first- and second-generation managed services has been dominated by systems integrators and software vendors that develop complex custom solutions for enterprise customers. First-generation managed services consisted of complex solutions created exclusively for one customer (for example, SAP implementations or local data-center outsourcing). EDS (an HP company) and IBM dominate this space.

Second-generation managed services extended the custom model to low-cost regions to take advantage of labor arbitrage (such as outsourcing call centers to India.) Two leaders in this space are Wipro and Tata. The market for custom solutions for enterprise customers is capped, and the opportunity for labor arbitrage declines naturally over time as economic conditions increase wages.

Service providers have the opportunity to offer third-generation managed services to small and medium-sized businesses, using advanced business models that potentially promise higher margins. These models rely on simple contracts and standardized solutions that can be replicated to smaller customers. Just as important, a high degree of asset reuse (virtual computing) allows SPs to meet price points that not only undercut current competition, but also meet the needs of the cash-conscious SMB market. Combined with network intelligence such as presence and advanced security, these offerings enable SPs to differentiate their end-to-end solutions against non-network providers. Figure 3 illustrates the evolution of the managed services market.

| | First-Generation Custom Solutions | | Second-Generation Labor Arbitage | Third-Generation Emerging Managed Services |
|------------|---|-------------------|---|--|
| Attributes | Highly customized Enterprise only Complex contracts No asset reuse | | Highly customized Enterprise only Complex contracts No asset reuse | Configurable SMB and enterprise only Simple monthly contracts High degree of asset reuse |
| Examples | ·EDS ·CSC | • IBM • Unisys | • Wipro • Tata | Cisco WebEx[™] conferencing Amazon |
| Impact | 10%–15% gross margins Flat growth | | 40%–50% gross margins 40% CAGR | 70%–80% gross margins 40% CAGR |

Figure 3. Managed Services Market Evolution

Source: "Next-Generation Managed Services: Winning Strategies for Network Service Providers," Cisco IBSG, October 2008

Given the opportunities described in Figure 3, one has to ask, "Why haven't SPs pursued these opportunities sooner, and how can they pursue them today?"

Traditionally, application- and computer-based services have been developed in-house or by large systems integrators. Systems integrators design, build, and run complex solutions that have become the foundation for most business processes. Only large enterprises have incorporated these solutions because their complexity makes them too costly for SMBs to acquire; SMBs rely mainly on off-the-shelf solutions that are less tailored and less sophisticated, yet more economical. Systems integrators thrive on complexity and customization and, therefore, build one-off hardware and software solutions. The same technologies that enable SPs to offer next-generation managed services—robust and intelligent network infrastructure, modular applications, remote management, improved CPE, and more standardized architectures—also enable systems integrators to move down-market with standardized offerings. To date, systems integrators have hesitated in attacking this market because of the risk it poses to their major market: custom solutions. Service providers should seize this opportunity by embracing these technologies and capturing market share before systems integrators can adjust their business models for the SMB market.

A New Managed Services Strategy for Service Providers

Service providers must employ a strategy that enables them to move up the managed services stack, thereby benefiting from higher margins and driving primary demand for lower-level services. Service providers must also use their unique market position and capabilities to differentiate the delivery of services so that they can compete with and win business from systems integrators and hardware vendors. We refer to this approach as the "up-and-over strategy," one that will help SPs succeed in offering next-generation managed services. This strategy is outlined in Figure 4.



Figure 4. Up-and-Over Strategy for Next-Generation Managed Services

Source: Next-generation Managed Services: Winning Strategies for Network Service Providers," Cisco IBSG, October 2008

Move Up the Managed Services Stack

Service providers can move up the managed services stack first through cloud-based services. These services employ a high degree of asset reuse and, therefore, are highly efficient compared with similar solutions deployed behind the firewall. As a result, SPs can operate at a significant cost advantage and achieve higher margins.

Similarly, advanced managed services provide strong pull-through for traditional network-based managed services. Because SPs already offer network-based managed services and have the asset base, they already own this space. Service providers may move easily into the adjacent hardware space as new computing equipment and CPE sit inside the cloud within the service providers' points of presence and central offices. Using off-the-shelf components, SPs can design, build, and deliver comprehensive solutions that meet their customers' needs. Traditionally, SPs have not excelled in the area of application-based solutions/services because they do not have the infrastructure to support it. Nonetheless, SPs are a viable sales channel for these solutions because they have a strong presence in the SMB market, where systems integrators and hardware vendors have been noticeably absent. Service providers can use their presence to become viable partners to application developers and hardware vendors in this market.

Differentiate Delivery

To differentiate delivery, the computing structure must move into the network to provide SPs with end-to-end control, resulting in the ability to guarantee service-level agreements and provide extensive and sophisticated levels of monitoring and support.

Using cloud-based architectures, in particular, allows SPs to improve cost economics significantly, which disrupts traditional application/hosting business models and meets the price points for SMBs. Cloud-based technologies offer increased scalability—a priority for medium-sized businesses seeking enterprise-class solutions at low price points. Cloud-based solutions also scale seamlessly in both volume and sophistication commensurate with the needs of the customer. Traditional delivery models cannot meet these needs.

A Window of Opportunity for Service Providers

Service providers have been the predominant suppliers of network-based managed services for decades. Nonetheless, the managed services market is evolving. The opportunity for SPs to take advantage of this evolution is here today. The window of opportunity, however, is finite, and the technology that enables SPs to move up the managed services stack is also available to their competitors (systems integrators and hardware vendors) who are using the same technology to move down the stack.

To be successful, SPs must embrace recent developments in Web 2.0 technologies, which open the door for them to expand their influence to include comprehensive hardware and network solutions and become a sales channel for SaaS. Moreover, by using Web 2.0 technologies, SPs can access the SMB market, which has been underserved by traditional technologies, enabling them to create a differentiated delivery model that lowers costs and provides end-to-end control.

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More Information

The Cisco Internet Business Solutions Group (IBSG), the global strategic consulting arm of Cisco, helps CXOs and public sector leaders transform their organizations—first by designing innovative business processes, and then by integrating advanced technologies into visionary roadmaps that address key CXO concerns.

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