

## Next-Generation Managed Services: The Key to Business Transformation

Service providers are moving from a network-centric to service-centric environment to meet consumer and enterprise demand for innovative multimedia applications and services. Increasing focus on the end user and meeting this demand requires advanced network deployment. But in the current cash strapped environment how can this be accomplished while at the same time achieve reduction in total cost of ownership?

Through creative partnering and innovative risk sharing options, new managed services and outsourcing business model options provide the framework for creating a next generation enabled portfolio of services for consumers and enterprises ready for Telco 2.0; without compromising network performance, service quality and security. This paper will address various transformational managed services business model options such as Managed Infrastructure, Managed End to End Services Operations and Full Outsourcing (Virtual Telco); and how they help Communications Service Provider achieve not only cost transformation but also business transformation.

## Executive Summary

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Market and economic conditions are requiring telecommunications network operators to dramatically re-invent their business models. Their aim is nothing less than business transformation, with the previous emphasis on network-centric services giving way to value-added, customer-centric content, solutions and services. Such a radical shift, however, raises numerous challenges for carriers. Addressing them in way that enables carriers to generate new revenues and deliver unsurpassed quality of experience (QoE) requires a managed-services partner with proven experience and established expertise in ensuring solution excellence.

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## Introduction

Current market conditions, IT/telecom convergence and the evolution of multimedia technology and applications have combined to create a daunting new challenge for telecommunications network operators. While a strategy built on a framework of reliable services delivery and the containment of costs was once sufficient to maintain competitiveness and spur growth, that approach alone is no longer viable. Today, the emphasis has shifted to a focus on aggressively driving top line growth by meeting the expanding demand for value-added, customer-centric solutions and services — coupled with achieving significant and long-lasting reductions in capital and operating expenses (CAPEX/OPEX).

Making this kind of change a reality requires nothing less than business transformation. Telecommunications network operators must embrace a fundamentally new strategy that breaks with the traditional network operations focused, point-solution model of the past and replaces it with one that has next-generation services-centric managed services as its foundation. Such a model is characterized by its ability to help operators address the following imperatives:

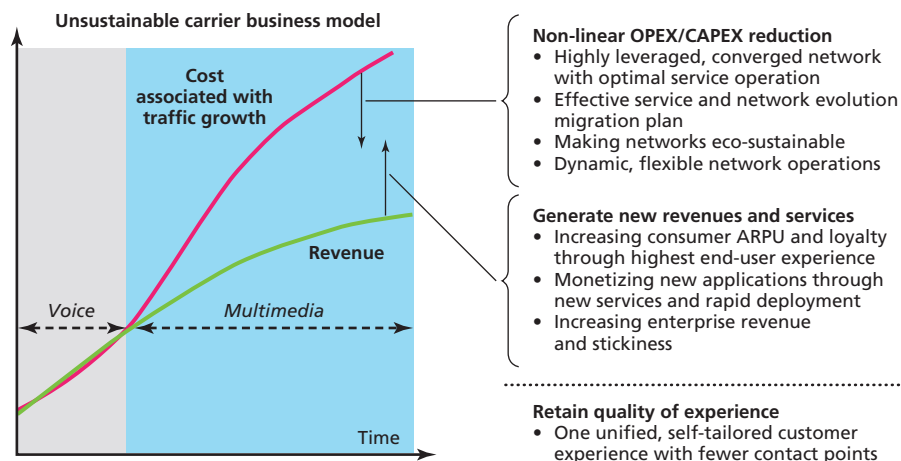
- Dynamic and flexible deployment and delivery of new services with the clear goal of generating new revenues
- Creation and maintenance of the highest possible quality of experience (QoE) for customers in order to ensure greatest satisfaction and preserve loyalty (“stickiness”)
- Significant, nonlinear reductions in CAPEX/OPEX that not only benefit the bottom line, but that also can also increase top-line revenues

However, business transformation of this nature is a complex undertaking that can place great organizational and operational stress on a network operator. Ensuring the success of such a critical endeavor requires the help of a trusted partner well versed in all aspects of telecommunications — one with a proven track record in bringing major initiatives to fruition, acknowledged expertise in technology, and established global alliances with leading IT vendors and service providers. The importance and scope of evolving to next-generation managed services requires nothing less.

## Why Business Transformation Is Necessary

A nearly unprecedented confluence of market realities has made business transformation and the deployment of next-generation managed services a necessity. Telecommunications network operators face what some have characterized as a “perfect storm” of challenges to the way they conduct their business.

Figure 1. Service provider challenges



## **The availability of affordable broadband**

High-speed connectivity is becoming cheaper and more widespread, fueling even greater demand. “Connectivity, like water, is now a human necessity,” says a recent independent report by Yankee Group Research (*Finding Value in Services: A Navigational Guide*, by Camille Mendler and Zeus Kerravala, May 2009). The report further notes that this demand will power 3.8 billion mobile handsets in 2009 and drive the replacement of 1.2 billion handsets for newer, feature-rich models. (These figures do not even include wireless MP3 devices, netbooks and other consumer device “must-haves.”)

## **Increased demand for the high-quality, converged multimedia services enabled by ubiquitous connectivity**

It’s the end-customer’s service that counts — the more rich, personalized, and interactive, the better. Customers don’t care about the networks. They care about which services are delivered and the content they’re paying for. And they want it on any device at any time and any location. Ironically, it’s the advances in connectivity that are driving this demand — but it’s network operators that have to find a way to meet it.

As the Yankee Group notes: “We’re turning voice into text, audio conferencing into video conferencing and embedding presence and context intelligence into standard business applications. Across the world, more than 12 billion IP video streams are now viewed every month in homes, offices and, increasingly, on the move. As these numbers continue to climb, they translate into complex networking challenges: How does one manage volume and also maintain quality?”

## **An economic climate that mandates a re-evaluation of the relationship between costs and revenues**

For many operators, the cost of delivering services is increasing faster than revenues are keeping pace. In fact, this so-called revenue-cost gap is generally a global phenomenon, as operators find that single-digit percentage reductions in expenses are simply not enough when it comes to meeting customer expectations for personalized multimedia services.

“We need to break away from our usual 5% to 10% OPEX reduction per year,” says a senior vice president of operations at one North American Tier 1 operator, summing up the inadequacy of the current model. “We need geometric or non-linear OPEX reductions.”

How can network operators extend and preserve their competitiveness in the face of these realities? By embracing a transformational business model built to address the following specific requirements.

The convergence of telecommunications and IT and the corresponding need to migrate from legacy to next-generation networks through:

- An executable and effective plan for evolving network to mobility-enriched, IP-centric environment
- Implementation of key technologies needed to address user demand for personalized, interactive rich-media content across multiple devices

Nonlinear or geometric reduction of CAPEX/OPEX through:

- A highly leveraged converged network with optimal service operation
- Dynamic and flexible network operations

Generation of new revenues and services through:

- Increased average revenue per user (ARPU) and customer loyalty through highest possible QoE
- Monetization of new applications via optimized services and rapid deployment
- Increased enterprise revenue and subscriber “stickiness”

Reduction of business and operational complexity through

- Smooth transition of customers from legacy to converged IP networks and services
- Simplification of business processes and network operations
- Adoption of single unified, self-tailored customer experience with fewer contact points

By re-envisioning their role in the context of such a model, network operators position themselves for migrating to next-generation managed services — and for setting into motion the transformation of their business.

## Key Elements Of Next-Generation Managed Services

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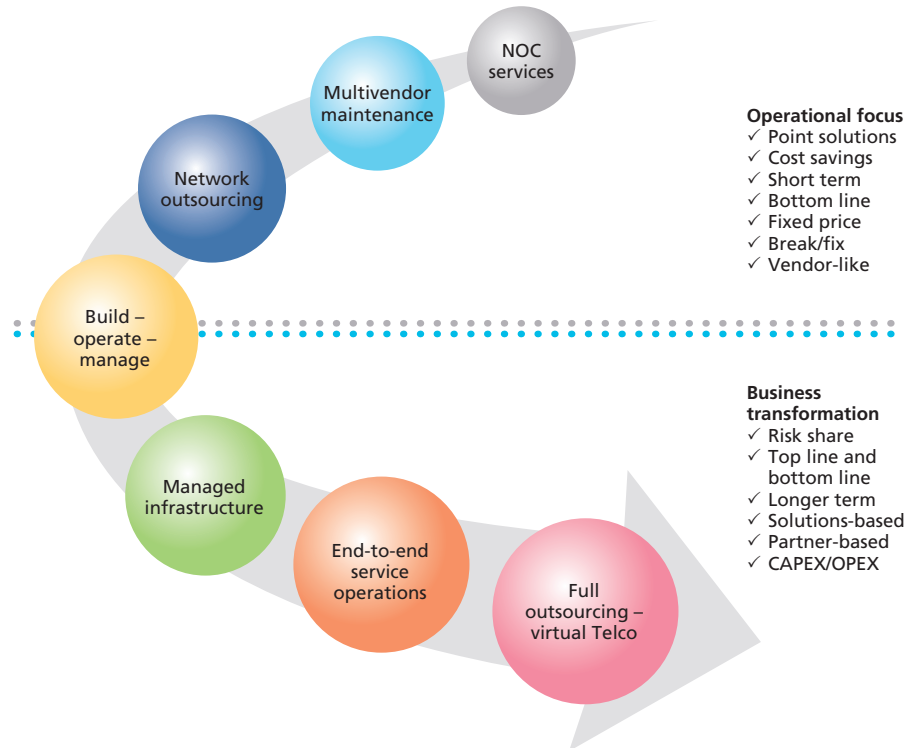
What the preceding makes clear is that the entire concept of “managed services” has changed. No longer can managed services be limited to operationally focused and network-centric. The main components of the old approach — NOC services, multivendor maintenance and network outsourcing — were sufficient in an environment where point solutions, cost savings and the bottom line were primary considerations. But the next generation of managed services, out of necessity, shifts the emphasis significantly to a focus on the end-customer’s services.

Specifically, next-generation managed services are geared toward achieving business transformation via a services-centric approach. The goal is to give customers the services they want, where they want them, when they want them — whether it’s IPTV, voice over IP, Internet access or a combination — across a variety of devices. In striving to achieve this goal, risk mitigation is evolving into a risk sharing approach. Greater attention is given to implementing both top- and bottom-line solutions — and to the need for significant, nonlinear reductions in CAPX/OPEX. Instead of short-term tactical advantages, the focus is firmly on long-term strategic gains.

But the adoption and successful implementation of such an approach can be a daunting, complex undertaking. That’s why it’s important for network operators to engage a trusted partner in realizing their goals. In fact, nine out of 10 communications-intensive organizations are seeking outside help as they build mobility-enriched, IP-centric environments, according to Yankee Group.

Such a trusted partner is able to address the most important components of the services-centric model.

Figure 2. Managed Services Solutions are moving from network-centric to service-centric



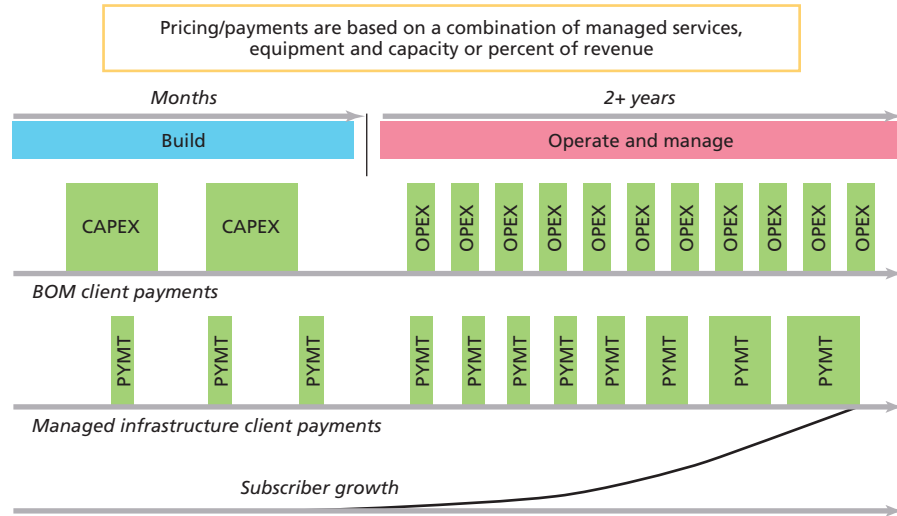
### Build/operate/manage (BOM) for mobility

Meeting demand for mobile services is an essential part of transformation. A qualified partner can help network operators with a comprehensive approach to cost-effectively roll out, operate and manage a new mobility network deployment. In the build phase, this typically includes design, planning, engineering, installation, integration, optimization test and turn-up. The operate-and-manage phase typically includes monitoring, fault management, field maintenance, repair, and performance and configuration management. Eventually, operational responsibility can be transferred to the network operator.

### Managed infrastructure

In building on the basic BOM approach, a trusted partner can share a portion of the risk in the early years of deployment with the network operator. Instead of paying all CAPEX up front before realizing any new revenues, the network operator can share the risk of build-out with the partner by deferring a share of the cost until it realizes subscriber growth. This isn't just a bottom-line solution: The freed-up dollars can be used to build subscriber growth further and faster — and grow the top line in the process.

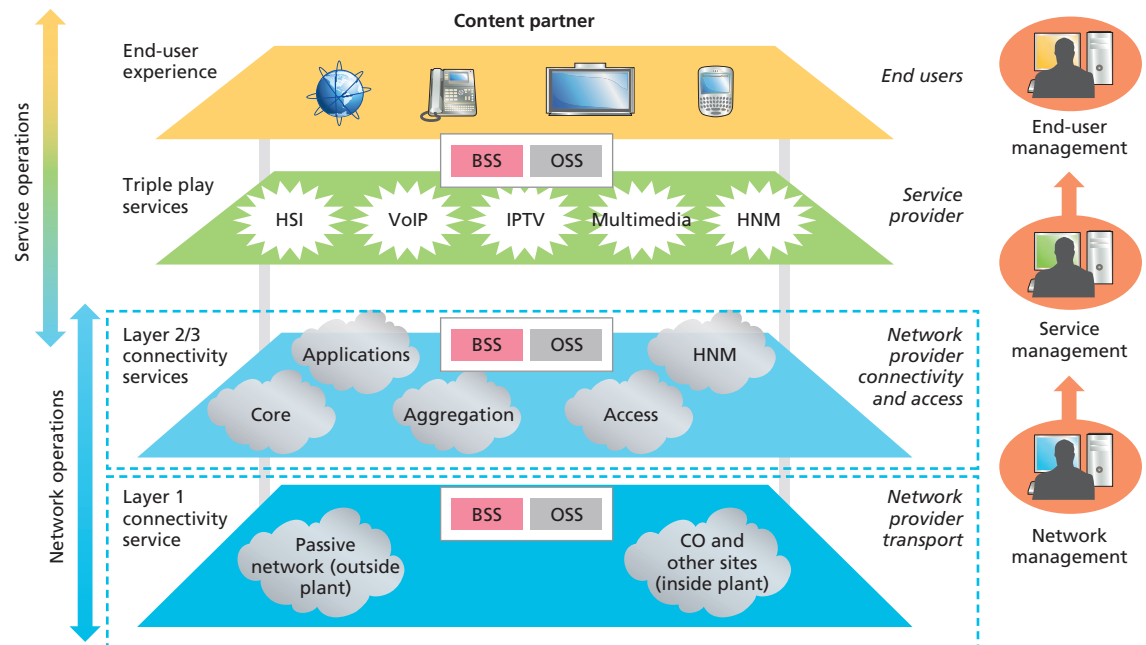
**Figure 3. Managed Infrastructure Model**



### Managed end-to-end services operations

By focusing operations from a network-centric to a services-centric approach, a partner expands operations support beyond the traditional network boundaries to include customer premises devices that control end-user services. Thus the “network” now includes devices like IP set-top boxes and IP modems, which are monitored for performance quality and customer-relevant metrics. Put another way: Operations processes are extended beyond just the traditional network to cover services-based metrics in a fully migrated, IP-based end-to-end network environment.

**Figure 4. Managed End-to-End Service Operations**

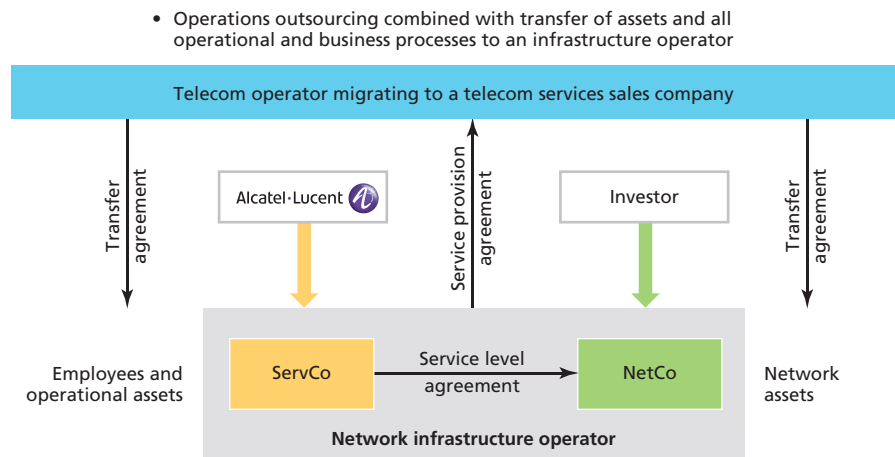




## Full outsourcing

In assuming end-to-end network operation processes and related functions, a partner can help network operators address critical requirements in a services-centric approach to business. Full outsourcing can be defined as creating a “virtual” telecom services provider by the combining network operations outsourcing with a transfer of assets to the managed services provider. The role of the outsourcing partner is to operate the new “virtual telco” and to manage the partnership of what would typically be multiple parties, where each performs a clearly defined role. This results in a tailored, single-sourced solution allows for clear accountability and helps increase the focus on quality, while helping to ensure a smooth transition to next-generation networks and realize long-term financial objectives.

**Figure 5. Full Outsourcing – Virtual Telco**

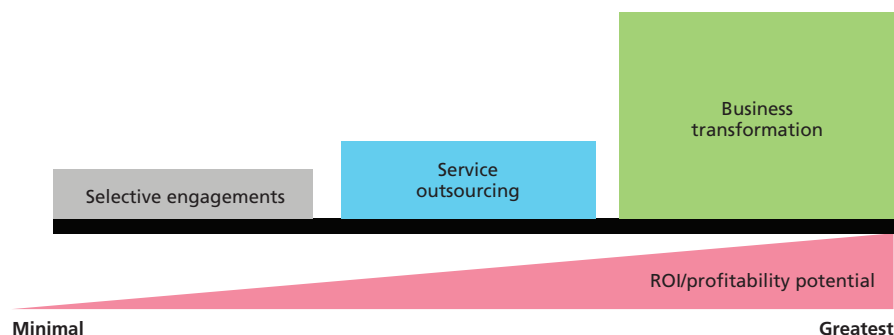


In engaging with a trusted partner for next-generation managed services, network operators are able to undertake the transformation of their business.

1. They can deliver operational and financial efficiencies through streamlined operations and new service delivery; reduced network overlays; fewer services silos; and lower IT costs.
2. They can transform operational processes for long-term EBITDA growth, by implementing new processes supported by convergent network and IT operations services; by shifting the operational focus to the end-user experience; and by migrating legacy networks and processes to a services-centric model.
3. They are able to develop and grow new waves of revenue from new sources, such as cloud computing, smart wholesale services and broadband value-added services. And they can encourage open service innovation and develop new business models (such as pay-as-you-go), while investing in people and in skills transformation.

As network operators evolve from a model based on selective engagements and service outsourcing to one based on business transformation, their return on investment and profitability achieve their greatest potential.

Figure 6. Managed Services Value Delivered



## What To Look For In A Trusted Partner

Why is finding the right partner so important? Because it can help bring about a transformation that influences the network operator's business in all areas. The next-generation managed services relationship extends through every level of the organization, from CEO and CFO to CIO and COO, touching on every aspect: business and strategy, marketing, IT and network design, and IT and network operations. The result of such a comprehensive approach yields new business models, new services, a high-leverage network, and flexible and dynamic operations management.

Therefore, network operators need to look for the following qualities in a prospective partner.

- A proven track record in bringing about business transformation through next-generation managed services
- Global multivendor capabilities supported by a local presence
- Broad technology reach
- State-of-the-art tools and systems
- Ready-to-deliver operational model
- Performance base pricing and risk sharing
- Re-engineering and transformation capabilities
- Global alliances with IT leaders
- Credible and sustainable economics

With its combination of IT experience and network expertise, Alcatel-Lucent can be that partner — helping network operators harness next-generation managed services to successfully transform their business.

Taking advantage of Alcatel-Lucent's managed services flexible business framework, network operators can leverage the following attributes into a customized business partnership.

Financial creativity, which can help network operators select among financing options addressing customized services, technology roadmap planning and subscriber service development and partnerships.

Customized risk models, which are tailored to transfer the network operator's risk to Alcatel-Lucent based on the success of the business plan and business performance commitments.

A clear, partnership-oriented business model, which champions the intent of the strategic alliance and provides leadership, alignment and management to those involved.

Network and service operations through thought leadership, ensuring that network operators can continue to add value and innovation to their offerings while closing the cost-revenue gap.

And with the Alcatel-Lucent managed services delivery model, network operators can leverage the following attributes into standardized delivery:

- *Best-in-class methodologies and execution mode* – A best practices database and knowledge in all facets of the network — from design and engineering to installation and integration to operations and support — helps Alcatel-Lucent address network operator needs, end to end, throughout the project lifecycle.
- *Field-proven tools and platforms* – With multivendor, multi-technology capabilities supporting more than 2,100 products from more than 490 vendors, Alcatel-Lucent is able to meet the precise needs of network operators across a range of technologies and applications.
- *Experience and maturity* – With employees averaging more than 15 years in the managed services industry, Alcatel-Lucent has the knowledge and perspective to help network operators navigate the challenges of migrating from legacy to converged IP networks and services.
- *Expertise and credentials* – With more than 80 customer networks supporting more than 185 million subscribers worldwide, Alcatel-Lucent knows how to help network operators meet their service delivery goals.

What's more, Alcatel-Lucent continuously refines its business framework and delivery model so that network operators can be sure they'll be able to address their specific solution needs. In short, by selecting Alcatel-Lucent, network operators can realize the clear benefit of being in a strategic partnership based on mutual success: long-lasting transformation of the business to meet the most important challenges.

## Conclusion

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Market realities make business transformation essential for today's network operators. No longer can they compete successfully with just a network-centric services model. They must instead move to a model based on value-added, customer-centric content, solutions and services, one that also helps them realize much-needed reductions in CAPEX/OPEX while adding revenue to the top line. However, the complexity and scope of such a transformation can introduce significant challenges. That's why it's necessary to engage a strategic partner equipped to confer the benefits of next-generation managed services — benefits like nonlinear reductions in CAPEX/OPEX; the sharing of risk; the introduction of new, revenue-generating services; and a commitment to shared success that ensures the competitiveness of the network operator for the long term.

**John E. Ramirez**

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John Ramirez heads the Solutions Management organization in Alcatel-Lucent's Managed Services Division. He is responsible for development of solutions that meet the changing demands of communications service providers and for building a knowledge center that helps Alcatel-Lucent quickly leverage learning from its projects worldwide.

John's career spans more than 25 years in the services industry, including with the former Lucent, where he both built and managed technical support and billing-and-order entry centers. From 1999 to 2004, John served as General Manager for Alcatel-Lucent's Global Network Operations Centers. He developed and implemented the Distributed Delivery model that is a key value proposition within Alcatel-Lucent's service offerings. He also has had several professional services practices.

John received a Masters of Business Administration from University of Phoenix in Denver, Colorado.

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