The Future Carrier Network: 
Adopting New Outsourcing Business Models

With the telecom market undergoing a fundamental shift, operators are facing an array of challenges from both new and traditional providers seeking to gain competitive advantage. This paper is meant to help operators embrace a new strategy for differentiating and competing successfully in a market characterized by flux. It lays out the case for viewing the market not in terms of new technologies and service roll-outs, but rather in terms of new strategic business outsourcing models. It defines the imperatives driving the need for this approach, lays out the specifics of several such models, and enumerates the business benefits each model delivers. Finally, it explains how a managed services partner with a deep mix of experience and expertise can help in fully realizing the benefits that these business models enable.
# Table of Contents

1 Executive Summary
1 Introduction
2 Outsourcing Business Models in Depth
   2 Assistance and Consolidation
   2 Outsourcing/Strategic Collaborations
3 Build/Operate/Manage (BOM) Solutions
4 Managed Capacity
4 Business Migration With Full Outsourcing
5 Finding the Right Partner
5 Conclusion
6 About the Authors
Executive Summary

Fixed, fixed-mobile and mobile operators are working together to deliver broadband services. Cable television providers are offering multimedia content, high-speed Internet access and voice services. Many IP voice operators are bypassing the traditional telecommunications network entirely to deliver their services via the Web.

If the telecom market seems like it’s in a state of flux, that’s because it is, as traditional operators and emerging players vie for competitive advantage by delivering a wide array of new content and service offerings.

Given the state of the market, operators need a new strategy in order to differentiate and compete successfully. Instead of relying solely on the deployment of new technologies and rollout of new services, operators need to think in terms of adopting new strategic operations approaches and outsourcing business models. This paper discusses the imperatives driving operators to make this change—such as reducing capital and operating expenses and generating new revenue—while defining the business models that can help in meeting critical business goals. In addition, it highlights the importance of choosing a managed services partner with a deep mix of experience and expertise to fully realize the benefits that these new business models enable.

Introduction

Operators are well aware of the challenges now confronting them. A fundamental market shift is under way as a wide range of traditional and new providers compete to deliver a variety of services and content offerings. Fixed, fixed-mobile and mobile operators, for example, are joining forces to deliver broadband. Cable TV providers have gone beyond content delivery to offer high-speed Internet and voice services as well. And IP voice operators have harnessed the Web in offering their services, bypassing the traditional telecommunications network entirely.

Given this environment, it’s become even more important for operators to aggressively address their pressing business imperatives. They need a way to increase revenues while improving time-to-market of next-generation services, and reduce churn while improving customer satisfaction. They need to enhance network performance, minimize risks, and streamline business processes—all while lowering capital and operating expenses (CapEx/OpEx).

In the not-too-distant past, operators might simply have implemented new technologies and rolled out new services in an effort to meet these challenges. But this approach is no longer sufficient. As competitive pressures continue to mount, operators need to view their business in the context of several emerging managed network services and outsourcing business models:

- Assistance and consolidation services
- Outsourcing/strategic collaborations
- Build/operate/manage solutions
- Managed capacity
- Business migration with full outsourcing

These models are hierarchical; that is, each level is characterized by how many of its assets an operator is willing to entrust to a partner or third-party provider. Additionally, each level represents another step up in the value chain—that is, the level of integration between partners and the tangible benefits delivered.
How can operators be sure that harnessing these strategic approaches will help them meet their critical imperatives? By enlisting an experienced managed services provider as their partner. Operators that are willing to trust managed services providers with both their back- and front-end business stand to gain a significant competitive advantage; in fact, studies show that outsourcing and infrastructure sharing can help operators increase their free operating cash flow by as much as 10%.

Potential benefits like these make selection of the right partner critical. Here’s what operators should look for when evaluating a potential partner:

- Worldwide references and industry-leading experience
- Proven track record of delivering low-risk, high-benefit solutions
- Demonstrated ability to speed time to market
- Enhanced customer support
- Dedicated program ownership
- Quantifiable operations efficiency

Understanding the business models and evaluating a managed services partner may sound like a fairly straightforward process. But given the competitive pressures that operators face, it is essential to examine these issues in detail.

Outsourcing Business Models in Depth

Assistance and Consolidation

The first model is assistance and consolidation. This can be viewed as something like consultancy and support. The operator has decided to implement change management but not to outsource the processes to a partner; rather, the operator calls on the managed services partner for help in analyzing the processes, to propose the change that’s needed, and to implement the change. The operator, meanwhile, maintains operation of the network, but begins to consider a managed services approach for operations with cost or technology challenges.

Assistance and consolidation is the simplest of the emerging outsourcing models, and can be seen by operators as a first step in addressing their business needs. Specifically, assistance and consolidation offers operators the benefit of lowering their OpEx.

Outsourcing/Strategic Collaborations

In the outsourcing/strategic collaboration model, the operator transfers a series of network-facing operations functions to the managed services partner. These functions can include:

- Network supervision, fault monitoring and trouble detection
- Network diagnostics, fault management and trouble ticket management
- Field operations and on-site management
- Trouble resolution and repair
- Service and network configuration management & provisioning
- Network performance & capacity management
- Security & disaster recovery management
These functions are inter-related to the partner, and they can include the transfer of existing processes, resources and staff as well. The partner optimizes infrastructure, processes and organization, and then operates and manages the network for the operator over a period of years.

The benefits of this option include optimization of OpEx and, potentially, CapEx; improved time to market; and transfer of risk to the partner, which is then responsible for overall network performance and management.

**Build/Operate/Manage (BOM) Solutions**

BOM is a comprehensive multi-phase model that addresses an operator’s need to cost-effectively plan, design, engineer, roll out, operate and manage a new network deployment. It comprises the following phases:

- **Build** (plan, design, planning, engineering, installation, integration, optimization, test and network turn-up)
- **Operate and manage** (monitor, fault management, field maintenance, repair, performance and configuration management)
- **Eventual transfer** (transition plan, knowledge transfer, transfer of assets, headcount and operational responsibility) to the operator

BOM meets the growing demand for new network deployments and expansions from operators (especially mobile operators) that are either resource-constrained or lacking adequate in-house expertise. In this model, the managed services provider really does function as a strategic partner, implementing the up-front design/plan/build stage; assuming operations and management for a minimum of several years; and finally transferring operational responsibility and knowledge to the operator.

The benefits of BOM to operators are clear: Optimization of OpEx and CapEx, risk transfer to the managed services partner, improved network performance, and improved time to market.

Figure 1: Build Operate Manage solution
**Managed Capacity**

In this option, the operator contracts for a BOM or outsourcing solution. But the solution combines services and network equipment in a creative pricing model with payments based on a unit of equipment or capacity, or on a percent of revenue. It is not a pay-as-you-grow option on equipment (that would be straightforward financing). Nor does the managed services provider assume 100% of the risk; rather, this model features a risk-sharing arrangement between partner and operator.

Managed capacity also involves the optimization of processes and network operations, as well as the introduction of new technologies and network assets. Although it is not a new concept, there are at the moment relatively few projects that meet the criteria of the managed capacity model.

The managed capacity model delivers a number of benefits. In addition to the inherent benefits of the BOM model or the outsourcing model, it further reduces CapEx and OpEx; it shifts some of the operational and technology obsolescence risk to the partner; and it enables improved network performance.

---

**Figure 2: Managed Capacity solution**

*Pricing/payments are based on a combination of managed services, equipment and capacity or percent of revenue*

*Build*  
- **CAPEX**
- **CAPEX**

*2+ Years*  
- **OPEX**
- **OPEX**
- **OPEX**
- **OPEX**
- **OPEX**
- **OPEX**
- **OPEX**
- **OPEX**

**BOM Client Payments**  
- **PMT**
- **PMT**
- **PMT**
- **PMT**

**Managed Capacity Client Payments**  
- **PMT**
- **PMT**
- **PMT**
- **PMT**
- **PMT**
- **PMT**
- **PMT**

*Subscriber Growth*

*Alcatel-Lucent’s Managed Capacity Solution builds on the BOM model and “shares the risk” in the early years of deployment*

---

**Business Migration With Full Outsourcing**

Business migration with full outsourcing essentially equates to business transformation through a full outsourcing solution, combined with different migration activities in the space of network technologies, subscribers, services, OSS/BSS, and business and operational processes.

The benefits here are large in terms of reduced CapEx and OpEx, risk transfer, optimized performance and generation of revenue from new services.
Finding the Right Partner

Obviously, these business models promise a variety of benefits. But realizing them requires operators to enlist the help of an experienced managed service partner. The right partner can help ensure the success of new projects while helping operators meet their main strategic goals.

There are a number of criteria to consider when evaluating a partner. First, make sure it has worldwide references that attest to its industry-leading experience. It should also have a comprehensive and demonstrable knowledge of networks and best practices. And it should have the full support of its corporation, along with access to its resources.

Second, it should have a proven record of delivering low-risk, high-benefit solutions. This is essential, given the need of operators to offload operational and technology risk.

Third, it should have a flexible business model that helps in speeding time to market and delivering enhanced customer support. Strategically placed global network operations centers and delivery platforms are critical components to look for, as well.

Fourth, a managed service partner must be able to demonstrate dedicated program ownership. It should offer clear accountability via service and performance metrics and business-driven key-performance indicators.

Fifth, it should boast quantifiable operations efficiency. The ability to eliminate silos and streamline processes is key to delivering the business benefits the various business models offer.

Conclusion

Today’s telecom market is characterized by flux and challenge. Differentiating to compete successfully no longer means rolling out new technologies and services; instead, operators have to review their business in the context of pressing imperatives—and the potential of emerging business outsourcing models to help them address these imperatives. By harnessing these new models, operators can realize a host of business benefits more rapidly and more cost-effectively.

These alternative business models can offer operators realistic alternatives to the way they do business today. In fact, Alcatel-Lucent already implements all of these models with various operators. It provides these services to operators handling some 120 million subscribers, in more than 70 different networks around the world.
About the Authors

**Jack Zatz**  
Director, Carrier Network Operations Offer Management  
Services Business Group  
Alcatel-Lucent

Jack Zatz oversees the development and roll-out of new offers and solutions in the Carrier Network Operations Business Unit within Alcatel-Lucent’s Network Operations Division. In this role, he develops the scope and content of new managed services solutions, the cost and pricing models, and the targeted sales strategy.

Prior to his current role, Jack was a managed services pursuit leader for Lucent Technologies. Prior to joining Lucent, he worked at Telcordia Technologies in several roles, including Vice President – Europe Services Business Unit, and Executive Director of Telcordia’s Network Performance and Operations Group. Jack’s professional career began at Bell Laboratories as a switching maintenance engineer.

Jack received his Master of Engineering in Operations Research from Cornell University and is currently completing his J.D. degree at Rutgers University - School of Law in Newark, New Jersey.

**Karin Yates**  
Marketing Communications Partner  
Services Business Group  
Alcatel-Lucent

Karin Yates leads the development and implementation of integrated marketing and communications for the Alcatel-Lucent Network Operations business division. Karin has global responsibility for formulation of communications and marketing strategy for Alcatel-Lucent’s managed network services and outsourcing business, as well as team leadership of communications and marketing specialists in the areas of analyst and public relations, speaker and event programs, online marketing, client marketing, and sales support.

Karin is a 25-year veteran of the telecom and business communications industry. Previous experience includes award winning positions in services sales and various positions in operations management, portfolio management and services development.