
IT and network integration in telecom companies

Creating efficiency and customer satisfaction

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Executive summary



The rapid proliferation of digital technology has created a surge in consumer demand and sophistication. Telecom companies have attempted to respond with an increasing focus on an excellent customer experience. However, the traditional organizational structure of telecom companies is ill-equipped to overcome the significant challenges — such as the complexity of the relevant systems, and the associated pressure on costs — presented by this changing environment. By integrating their business support systems (BSS) applications (in the past managed by the IT department) with operations support systems (OSS) applications (previously handled by the network department), telecom companies can boost the efficiency of their operations and better synergize the elements of the technology backbone.

Integrating the two platforms, however, will require companies to overcome several obstacles. Both IT BSS vendors and network OSS vendors are highly specialized and many have not yet acquired convincing experience in providing the integrated platforms that telecom companies now need. Other technological issues relate to fragmented systems architecture, with its disparate legacy equipment and multiple vendor systems, and the migration process for often inconsistent data. Meanwhile, on the organizational side, the fear of a loss of influence or position will inevitably create resistance to change. Furthermore, the customary executive mind-set, which views technology as more of a target for cost savings than a vehicle for growth, may also block the great opportunity for progress that now presents itself.

By changing this outdated mind-set, and by building the right technological and organizational capabilities to surmount these challenges, telecom companies can establish robust foundations, enabling them to offer the increased innovation and heightened customer experience now demanded by a new breed of consumer.

Key highlights

- Telecom companies must integrate their BSS and OSS platforms in order to meet demands for innovation and excellent customer experience, prompted by huge digital growth and the resulting advent of a much more sophisticated consumer.
 - This necessary transformation will present a number of technological and organizational obstacles that companies need to overcome.
 - Only appropriate technological and organizational capabilities, and a new mentality that embraces the strategic potential of IT, can pave the way for this transformation.
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An essential transformation

The digital upheaval in the telecom space is calling into question the clear distinction that telecom operators have traditionally maintained between their IT and network departments. IT managed BSS applications, whereas the network department dealt with OSS applications. BSS host customer touch point applications and supporting inventories, whereas OSS host network operations applications that play an integral role in operations' automation and network management (e.g., service activation, performance measurement, etc.). That separation is no longer tenable as it is increasingly inefficient and fails to deliver an excellent customer experience. Telecom companies therefore need to respond to the changes wrought by digital technologies by integrating BSS and OSS.

The growing use of digital applications has had several consequences: increased user sophistication and so more demanding customers; a resulting greater focus on customer experience, including an emphasis on providing a seamlessly integrated complex array of offered services that now go beyond voice and pure data connectivity; and an explosion in the volume of data traffic. In 2012, for example, spending on wireless data for the first time topped spending on voice services in the U.S.¹

The need to manage this burgeoning demand in a cost-efficient manner, the complexity of the systems involved, and evolving technology infrastructure leave operators with no choice but to rethink the long-standing divide between network and IT at both the technological and organizational levels. By doing so, they plan to increase their efficiency and agility as they prepare to cut the fat and build muscle.

Bridging this divide, however, involves crossing substantial internal obstacles, most notably involving important organizational change. Adding to the challenge is that chief technology officers (CTOs) are already concerned about their existing fragmented systems architecture, inconsistent data across different systems, and the migration challenges arising from legacy systems.

The digital upheaval in the telecom space is calling into question the clear distinction that telecom operators have traditionally maintained between their IT and network departments.

Migration issues become more complicated when telecom operators consider the integration of available market solutions that may complement existing systems. These solutions may be marketed as completed and ready to use, but often they are not. Both BSS and OSS vendors try to capitalize on their historical dominance of the respective domains (IT for BSS and network for OSS) to expand to other domains, thus capturing a larger market share of sales. However, the vendors' lack of experience in dealing with the demands of both domains simultaneously is a factor that must be borne in mind.

Companies can respond to the challenges of BSS–OSS integration by creating the right mix of technology and organizational capabilities. On the technology side, this entails a clear road map, a data migration strategy, and a phased management process for the transformation. On the organizational side, operators need to mold the integrated BSS–OSS structure in a way that encourages collaboration, overcomes resistance to change, and aligns technology across business units.

CEOs and CTOs have an unprecedented opportunity to benefit from BSS–OSS integration. By achieving this integration and simplification, together with synergies in organization, systems, vendors, and processes, they will improve efficiency. More available resources can then be invested in developing attractive and profitable products and services that meet commercial and technological demands, allowing companies to benefit from rapidly changing market conditions. BSS–OSS integration therefore fits into the Strategy& framework called *Fit for Growth*.

IT-network integration as an enabler of growth

Booz & Company has elaborated an approach called *Fit for Growth* that helps companies to cut costs strategically and so position themselves for growth. Instead of across-the-board cuts, companies focus on developing muscle, enhancing the capabilities that allow them to perform better than the competition, and cutting fat, the unproductive and unnecessary costs that are a drag on growth.

There are three, mutually reinforcing aspects to *Fit for Growth*: articulating clearly defined strategic priorities and then putting money into the capabilities that will allow firms to meet these priorities; optimizing costs by having

highly discriminatory and efficient spending practices that ensure resources are used in the right way and to the full; and establishing an organization that is geared to growth, agile, and lined up behind the strategic priorities.

BSS–OSS (IT–network) integration fits into the approach as it provides telecom operators with an opportunity for growth and increased profitability. Integrating IT and network services allows telecom companies to better address their customers' evolving demands, which is a competitive necessity, and because it leads to cost reductions, simultaneously allows them to reinvest that money into building distinctive capabilities.

Digitization growth and customer experience

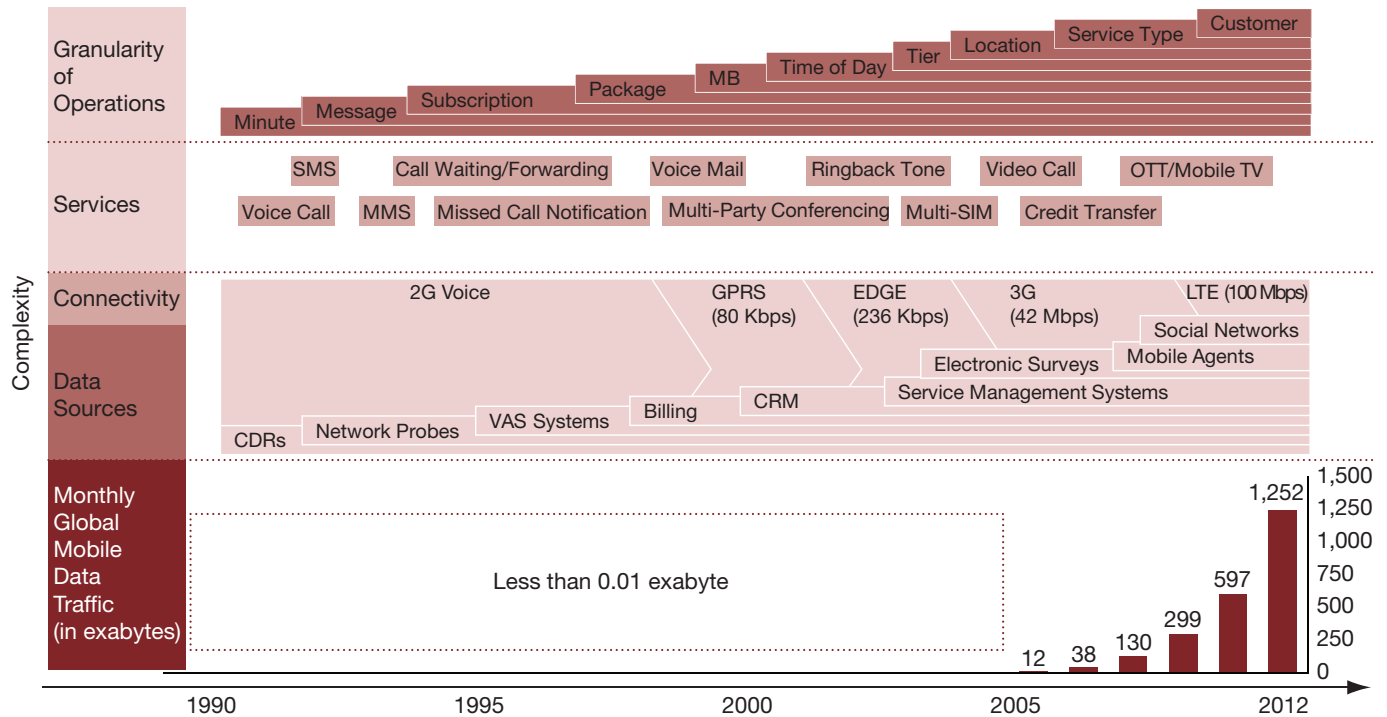
The digital revolution has triggered a tremendous growth in global data generation, leading to both opportunities and challenges for telecom operators. It seems that everything around us — both people and machines — is becoming connected, and these connections are unleashing an unprecedented volume of information that can provide the basis for real-time decision making and automated actions. Data growth is doubling each year. Indeed, 90 percent of the data in the world today has been created in the past two years, and will reach the capacity of around 34 billion iPads by 2016 (*see Exhibit 1, page 9*).²

Telecom operators are generally thought to possess the capacity to handle this volume. However, they need to do more than deal with rising volumes of data. Operators have to respond to increasing user sophistication and unprecedented sensitivity of applications to data quality, resulting in the need for them to build analytical capabilities to deliver innovative services and an excellent customer experience.

This is particularly relevant for the Middle East, which has witnessed a remarkable growth in data traffic consumption. Several factors explain this development: leapfrogging fixed Internet through mobile technologies; the ability of operators to introduce high capacity networks; and favorable demographic trends thanks to a large, young, technologically adept population.³ However, the growth has also brought its share of challenges — user sophistication that leads to higher expectations and customer churn; the increased cost of technology operations; and an overall reduction in average revenue per user (ARPU). As an example, mobile and fixed data traffic has grown by more than 100 percent in the Middle East over the past two years, while ARPU has decreased by 12 percent between 2011 and 2013.⁴

Exhibit 1

Services uptake has become increasingly sophisticated



Note: MB = Memory Buffer, Mbps = megabits per second, OTT = Over-the-Top, SMS = Short Message Service, MMS = Multimedia Messaging Service, SIM = subscriber identification module, GPRS = General Packet Radio Service, VAS = Vendor Access System, EDGE = Enhanced Data for Global Evolution, LTE = Long-Term Evolution, CRM = Customer Relationship Management.

Source: Cisco, Visual Networking Index: Forecast and Methodology, 2012–2017 (2013); Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2012–2017 (2013); Ericsson, “Traffic and Market Report: On the Pulse of the Networked Society,” June 2012; Strategy& analysis

Consequently, operators need to acquire a firm grasp of the actual impact and profitability of technology assets. They need to develop their ability to improve the quality of customer experience through automation that makes full use of insights on customer behavior derived from data from integrated BSS and OSS systems.

BSS–OSS integration should happen at two levels: horizontally and vertically (*see Exhibit 2, page 11*).

Horizontal integration

CTOs and chief information officers (CIOs) have been pursuing support system transformations that allow efficient delivery of converged services (telephone, video, and data) that meet high customer expectations. These transformations involved separate integration improvements within the business and operations support domains. Consequently, companies have simplified their own internal organizational hierarchy for staff on the technology and business sides. Off-the-shelf platforms based on open standards have been adopted for both BSS and OSS, and have been horizontally integrated across different fixed and mobile network domains.

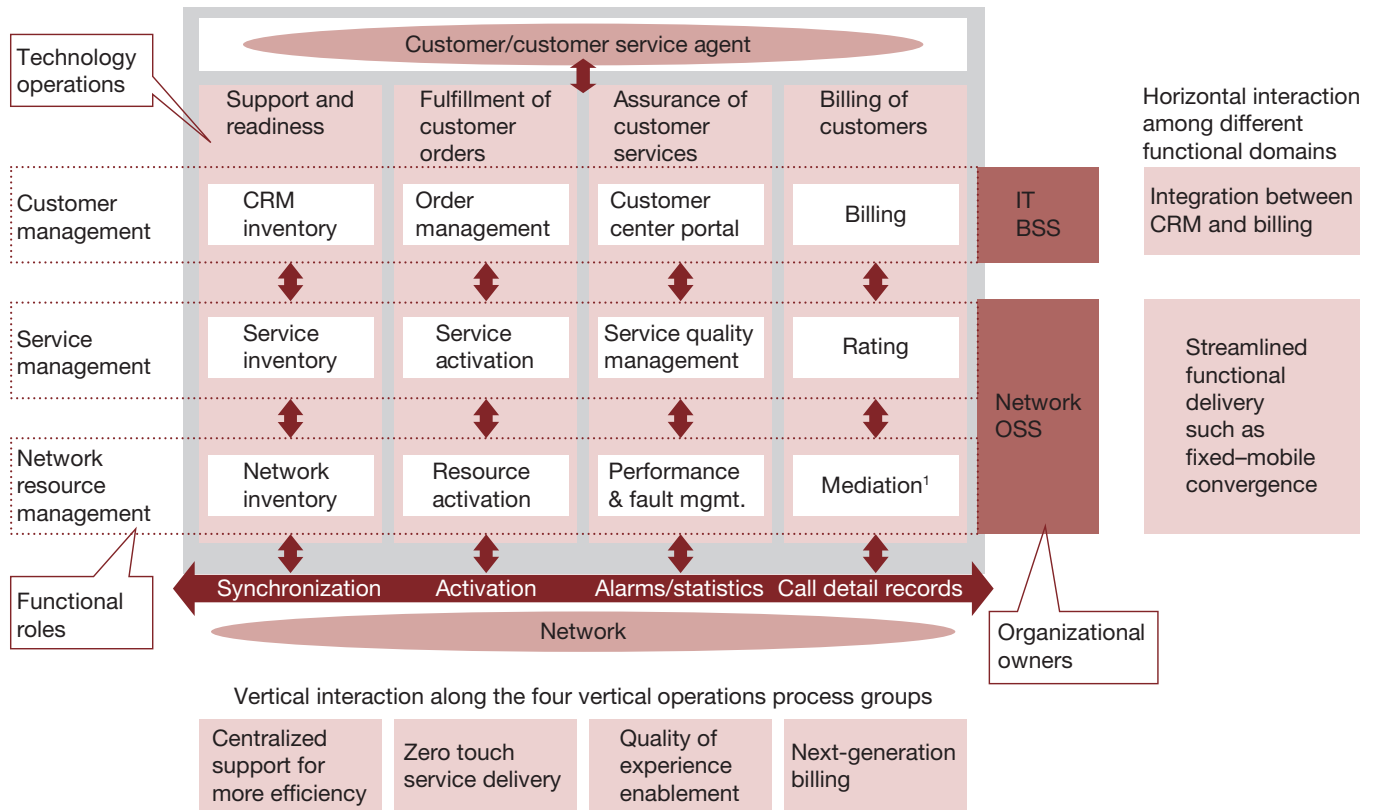
Vertical integration

Support systems must now also undergo vertical integration because customers are more than ever expecting near real time delivery of digital services. A well-integrated BSS–OSS stack (the layers of components that are used to provide a software solution or application) would make possible several additional benefits to complement the current process of horizontal integration. The vertical integration of BSS and OSS offers operators the capability to fully automate delivery and maintenance of services, from customer touch points to network elements configuration. Investing beyond the horizontal integration to vertical integration, therefore, reduces the complexity and costs of technology, and enables a superior customer experience.

Integration of BSS and OSS systems would lead to increased efficiency, automated service delivery, improved quality of customer experience, and next-generation billing.

The vertical integration of BSS and OSS offers operators the capability to fully automate delivery and maintenance of services.

Exhibit 2
How BSS and OSS support systems interact



¹ Typically part of BSS.

Source: Partially adapted with the kind permission of Alcatel-Lucent from Alcatel-Lucent; "Achieving Efficient Operational Transformation," Technology White Paper 2007; Strategy & analysis

Centralized support for more efficiency

Support systems collect, store, and respond to the same data, whether it be commercial or technical network information. The data has traditionally been maintained in separate databases (such as customer, service, and network inventories), inevitably resulting in inconsistencies. Such a disparity of systems has made it almost impossible to correlate subscribers' services with utilized network entities in real time. Only such a real-time correlation can deliver most business operations (fulfillment, customer care, and billing) efficiently.

Operators therefore need to develop a unified and simple data management system across both the IT and network domains. This involves centralized data stores that connect customer information (typical BSS data) with service configuration information (typical OSS data). Such an arrangement provides a clear overview focused on the customer, a solid foundation for efficient business operations that spans service delivery, quality of customer experience, and billing. One example of the resulting enhanced service assurance would involve the efficient correlation of network nodes (any device connected to the network) and hosted subscribers. A failure alarm from a network node would automatically trigger alarms to support centers, which would then contact the affected customers proactively. By contrast, in the current setup there are disparate databases that do not allow for such efficient real-time correlation. So instead of warning customers of potential problems, operators wait for customers to complain.

Zero touch service delivery

In the past, operational gaps have been evident across the service delivery process, which is the journey from order creation (a BSS responsibility) to network fulfillment (an OSS responsibility). Order registration, administration, and tracking have been performed separately and independently for each of the products the customer subscribes to. Substandard administration of orders has delayed deliveries for months, frustrated customers, and increased the number of fallouts (lost or inaccurate orders). This inefficiency is costly. An annual increase of just two percentage points in the order fallout rate has an estimated cost of US\$1 million for an operator with 3 million broadband subscribers.

Operators need to develop a unified and simple data management system across both the IT and network domains.

Operators can efficiently orchestrate order fulfillment through the integration of what is now separate customer order and service fulfillment systems into one single-entry administration and tracking system. This enhanced integration emulates central business logic for order orchestration across services and network elements. The centralized orchestration also allows operators to move toward becoming application providers through improved delivery of multiservice products.⁵

For example, a North American operator introduced an intelligent orchestration layer (which binds multiple products, technologies, and processes to enable comprehensive IT process automation). This orchestration layer efficiently integrated order entry and service fulfillment support systems. The maximum provisioning time (the time it takes to prepare and equip a network to provide new services to its users) decreased by 99 percent, while the average time to deliver the service improved by 79 percent for all mobile and fixed IP products. The system introduced automated real-time decision making during order delivery.

Similarly, in the same company, when a customer asks for mobile broadband connectivity and then decides to add a mobile TV subscription, the integrated support system allows for an on-the-spot survey of the mobile broadband network capacity around the location where the subscriber spends the bulk of his or her time. In that way, real-time information on the feasibility and expected timing of the subscription is immediately available. Without such integration, a customer complaint would have been the most likely outcome.

Quality of experience enablement

To understand customer behavior and perception, operators have traditionally analyzed only commercial customer relationship management (CRM) information. However, achieving a genuine 360 degree, comprehensive view of customer perception is possible only through the correlation of available commercial data points (derived from BSS areas such as subscriptions, promotions, and usage) and network data points (from OSS data such as location, or the service affecting network alarms). A well-integrated service assurance system can supply this view, and it therefore constitutes an essential asset in the quest to increase revenue and profitability, and improve competitiveness.

For example, by making use of immediately available subscription, charging, and network information in real time, a Middle East operator was able to create a real-time map displaying the revenue generated from each service for each geographic area, together with the relevant service performance in that area. Consequently, investment decisions were easily rationalized on a very precise zone-by-zone basis.

Another Middle East operator was able to improve its call answer rate by 50 percent through the introduction or expansion of relevant call completion services. These services allowed the company to analyze subscriber behavior and optimize network investments.

Furthermore, customer call centers can reap considerable benefits if network information, from OSS systems, is easily accessible and combined with information from BSS systems. The call centers will be able to provide instantaneous advice to callers on the root cause of any particular network problem, instead of resorting to the usual call-back process, which often entails a delay of between three and five days.

Next-generation billing

Billing systems were originally designed for post-paid (customers use services first, and then pay) batch processing of call records, which included voice calls and messaging. On the other hand, real-time charging systems were designed for pre-paid (first pay, then use) charging of the same services.

Customer call centers can reap considerable benefits if network information, from OSS systems, is easily accessible and combined with information from BSS systems.

An integrated billing system, which reduces costs and time to market, takes functionality from existing systems for both post-paid and pre-paid. It is sold by all leading IT and network vendors.

The integrated system makes further services possible, such as using advanced analytics and dynamic billing to offer tailored real-time promotions based on details such as the customer's location, time of use of services, assurance level, payment methods, and preferred type of activity (e.g., email, browsing, or downloads).

Convergent billing is on the agenda for many telecom operators, and is likely to be the first step in the integration of BSS and OSS. A survey we conducted in 2010 of 55 CTOs and CIOs worldwide revealed that 70 percent of respondents named billing transformation as one of their top three priorities. In a recent survey of Middle East operators, 55 percent of respondents said they have already begun to replace pre-paid charging systems with convergent solutions, and 50 percent will replace their post-paid billing systems, as well.

Fundamental implications

An efficiently integrated BSS–OSS architecture will require further developments in systems and organization. At the systems level, streamlining business processes and implementing end-to-end solutions is now deemed preferable to distributed systems and silos. The overarching goal is to integrate and simplify, while minimizing distribution of business logic across multiple application layers.

From an organizational standpoint, there is an opportunity for a more efficient and leaner structure. Traditionally, IT has managed BSS, the network department has managed OSS, and operators frequently had a cross-functional team to meet commercial demands that straddle both areas. This arrangement had been acceptable until recently. However, with such demands growing and platforms converging, the idea of merging BSS and OSS development and maintenance activities under one entity offers a genuine opportunity for enhanced operations.

BSS–OSS systems integration

If operators are to benefit from real-time data, they will need to rethink their technology strategy, concentrating on those capabilities required to provide an excellent quality of experience, real-time customer support, and efficient troubleshooting. They now have the opportunity to exploit the potential of convergence by integrating support systems both vertically and horizontally, and thereby become an integrated, simplified digital operator.

Rethinking vendor strategy

IT BSS vendors have tried to take advantage of the market need to provide differentiated services. Operators have in the past looked to equipment vendors such as Ericsson, Nortel, and NSN to introduce technological innovation, and these companies have responded to demand by providing equipment that offers improved data and voice performance.

From an organizational standpoint, there is an opportunity for a more efficient and leaner structure.

Network vendors such as Ericsson rely on their traditional strengths in offering robust and proven services based on their past networking experience, whereas software vendors such as Convergys look to move deeper into the OSS domain by offering a full suite of integrated applications on top of their traditional BSS fields of billing and charging. Both types of vendor are actively expanding. For example, Ericsson acquired LHS in 2010 to offer a comprehensive BSS–OSS solution under its own brand.

Network OSS vendors are not giving up on their attempt to secure a position in the market despite the clear dominance of IT BSS players. This market dominance has been threatened by shrinking margins in traditional infrastructure sales. The network OSS vendors have responded by assisting operators in their desire to provide differentiated services. As a result, efficient BSS–OSS stacks have become indispensable products for both operators and network vendors.

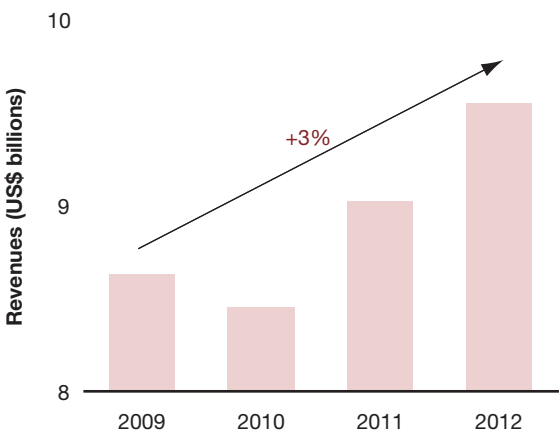
The network OSS vendors have therefore started to capitalize on their long-standing relationships and high-value contractual commitments with operators to promote the support systems they provide. However, their focus on support systems does not necessarily lead to their long-term advantage. IT BSS vendors are better placed when it comes to customer operations and touch points, and they also can boast long-standing relationships with business units at operators.

Network OSS vendors may be pushing very hard to enter into what has been IT territory, presenting a compelling value proposition. However, operators will still be seeking a deeply integrated BSS–OSS systems infrastructure, even if this comes at a higher price (*see Exhibits 3 to 5*).

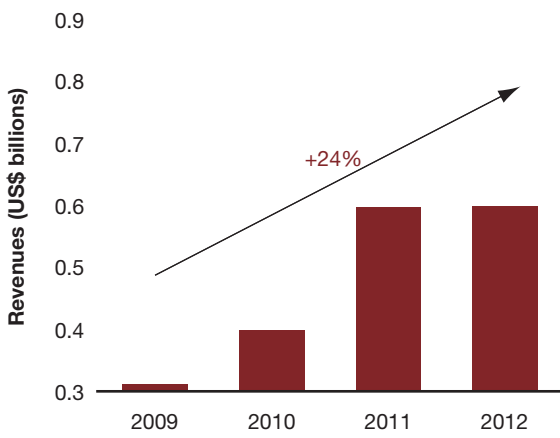
Exhibit 3

IT vendors dominate BSS sales in the integrated BSS–OSS vendor landscape

IT Vendors



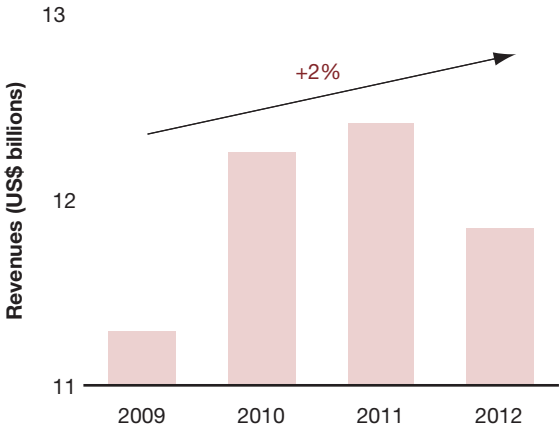
Network Vendors



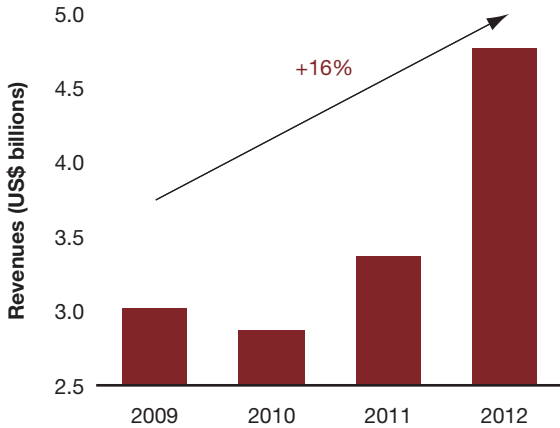
Source: OVUM, “Telecoms Vendor Contract Database,” December 2012; INFORMA, “Market intelligence on telecommunications support systems,” 2010; IDC, “Worldwide OSS and Billing 2011–2016 Forecast,” 2012, “Worldwide OSS and Billing 2007–2011 Forecast,” 2008, “Worldwide OSS and Billing 2010–2015 Forecast and 2009 Vendor Shares,” 2010; Strategy& analysis

Exhibit 4
IT vendors are being challenged by network vendors for sales of OSS systems

IT Vendors



Network Vendors

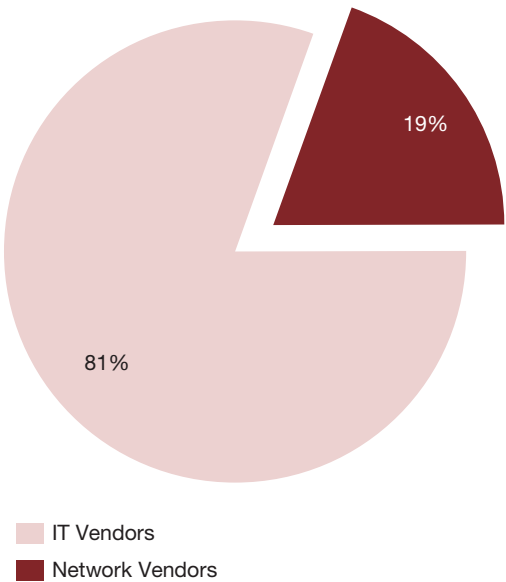


Source: OVUM, "Telecoms Vendor Contract Database," December 2012; INFORMA, "Market intelligence on telecommunications support systems," 2010; IDC, "Worldwide OSS and Billing 2011–2016 Forecast," 2012, "Worldwide OSS and Billing 2007–2011 Forecast," 2008, "Worldwide OSS and Billing 2010–2015 Forecast and 2009 Vendor Shares," 2010; Strategy& analysis

Exhibit 5

IT vendors dominate the integrated BSS–OSS vendor landscape

Shares of Combined BSS-OSS Revenue Distribution (2012)



Source: OVUM, “Telecoms Vendor Contract Database,” December 2012; INFORMA, “Market intelligence on telecommunications support systems,” 2010; IDC, “Worldwide OSS and Billing 2011–2016 Forecast,” 2012, “Worldwide OSS and Billing 2007–2011 Forecast,” 2008, “Worldwide OSS and Billing 2010–2015 Forecast and 2009 Vendor Shares,” 2010; Strategy& analysis

Obstacles to systems integration

Operators' goal of efficient BSS–OSS systems integration faces a number of challenges, including fragmented systems architecture and data inconsistency and migration difficulties.

Fragmented systems architecture. Operators have maintained a fragmented systems architecture consisting of legacy equipment and thousands of proprietary vendor systems for both BSS and OSS. They have done this to avoid endangering the delivery of traditional services such as mobile voice communication, fax, or private branch exchanges (PBX), and also because they were under pressure to deliver services and infrastructure as quickly as possible. As a result, they did not feel they had the luxury of being able to build a mid- to long-term technology road map. All these systems therefore involve substantial support costs. They also have limited potential for integration, because they were developed before the evolution of industry-wide standards. The migration of such systems will be financially onerous and present a high risk of failure, as not all of these systems are fully supported or documented.

Data inconsistency and migration difficulties. A significant number of BSS–OSS transformation programs fail during the data migration stages, because data cleansing either takes too much time, proves to be too expensive, or is not properly completed and so leads to problems after the formal switchover. These failures occur because the BSS–OSS integration process often entails the centralization of data management systems, as well as the consolidation of applications and switching to new vendors. A lack of clarity on the quality and cleanliness of existing data makes predicting the costs of this process extremely difficult.

BSS–OSS organizational integration

Operators should make use of the gradual integration of BSS and OSS platforms, and the changing vendor landscape, to centralize BSS–OSS development and maintenance activities. At present, developing and maintaining BSS on the one hand, and OSS on the other, call for different ways of working. BSS is focused on responding quickly and efficiently to commercial and consumer challenges, whereas the OSS is geared toward optimizing network operations.

However, the required manpower for the development and maintenance of platforms (servers, data centers, etc.) can now be combined. Because BSS and OSS base their platforms more and more on off-the-shelf IT servers, the required skill sets to manage them overlap.

A centralized entity that manages all support system platforms would benefit operators in several ways. It would provide a comprehensive view of customer experience initiatives, enable a clear perspective on how vendors are being managed, and alert operators to potential requirements for future systems architecture.

To achieve this organizational integration, operators will need to confront three main challenges: traditional OSS vendor management, resistance to change, and the business commitment to IT.

Traditional OSS vendor management. Many network vendors bundle their OSS and network nodes offerings together. Current contractual obligations can therefore favor the retention of existing network vendors because they increase the switching cost to newer integrated solutions offered by other providers. In addition, IT BSS teams have little experience in handling OSS vendors as they have previously dealt with customer-facing issues. Understandably, many CTOs fear that BSS–OSS integration costs will diminish the urgency of network-related OSS operations and necessary maintenance, delaying such work or even jeopardizing it.

Resistance to change. BSS–OSS integration combines several development and maintenance activities in one organization. As a result, individuals may become resistant to change as they fear losing their organizational influence or job security. A common location for such resistance is billing. Post-paid billing is administered by BSS. Pre-paid charging is handled by OSS. Organizational conflicts have often delayed complete migration of pre-paid billing to an integrated BSS system, despite technological readiness.

Business commitment to IT. Operators need to be convinced of the value of IT in advancing corporate strategy if they are to commit to the investment required for BSS–OSS integration. Corporate leaders have in the past viewed IT as a target for cost savings through outsourcing and consolidation. Unless the corporate leaders regard IT as a vehicle to differentiate core customer experience and increase revenue, they will not prioritize IT BSS related initiatives. This lack of alignment between IT and business units will threaten prospects for BSS–OSS integration.

Building the capabilities to secure integration

Operators stand to gain maximum benefit from a focused BSS–OSS integration enhancement program that builds on their strengths and that prioritizes those areas where maximum benefit can be realized from integration.

They must also concentrate their attention on technology and organization capabilities, and in doing so confront the challenges identified earlier.

Technology capabilities

On the technology side, operators need to improve their technology planning capabilities to support optimized operations while pursuing support systems transformation programs across both BSS and OSS.

Updated technology road maps. To accelerate the whole process of innovation and improve time-to-market, operators must develop a technology road map that is properly aligned with their commercial strategy. Shrewd plans for modernization and the timely phasing out of outdated technologies are both important to remain competitive. Developing and maintaining an up-to-date technology road map also guards against architectural fragmentation, and enables the implementation of an effective and coherent BSS–OSS stack.

Phased data migration. Consolidating, or correlating, all databases (for network, services, and subscribers) is a significant challenge. Instead of trying to achieve this simultaneously, operators can prioritize those applications that are best served by a consolidated database for BSS and OSS. For example, a European operator has built a centralized customer experience management (CEM) database

that interacts with its CRM, service, and network databases. This interaction provides comprehensive customer modeling and profiling. Such a phased approach to data migration reduces the risks associated with migration, while allowing for priority areas to be tackled expeditiously.

Separate BSS–OSS transformations. To increase their readiness for BSS–OSS integration, many operators embarked on separate transformations. Such divided transformations identify BSS and OSS priorities across both programs, so that integration initiatives can proceed in parallel. For instance, one outcome of a new generation operations systems and software (NGOSS) transformation can clarify which isolated legacy equipment should be maintained by old network management systems. Meanwhile, both BSS and OSS transformations can identify potential areas for CEM initiatives.

Organizational capabilities

Operators need to design an effective technology organization and ensure a smooth internal transformation.

Change management program. Change management will be a crucial factor in any successful BSS–OSS transformation program. The program must ensure alignment of key stakeholders across strategy, regulatory, commercial, technology, HR, and finance functions. This is critical as it will be necessary to freeze existing systems for a limited time, with inevitable impact on daily operations.

BSS–OSS integration is likely to result in shifted responsibilities, redundant systems, and reduced head count. A clear internal communications strategy, coupled with a resource development plan for staff training and realignment, should be developed in coordination with relevant stakeholders. This will ensure that resistance to change is dealt with and the value of the integration is effectively communicated to employees.

Technology organization design and transformation. An effective BSS–OSS convergence program should be sensitive to the company's existing culture.⁶ It should ensure that natural competition between network and IT organizations is prudently managed.

The decision about whether the integrated BSS–OSS unit should be placed under the auspices of the IT department or the network department requires careful consideration. There is no automatic, clear answer to that question. Whatever the decision, the emphasis must be on developing an organizational unit focused on BSS–OSS convergence, together with a resourcing strategy that identifies what exactly the new technology function requires to act as a partner to the business. Resources can then be transferred gradually to the new unit, minimizing the impact on existing operations.

Positioning technology as a strategic tool. Operators need to embrace integrated BSS–OSS systems as the means to facilitate strategic business operations. BSS–OSS initiatives are more likely to succeed if companies are inspired by their potential to improve customer experience (typically BSS enhancements), rather than because of the optimization in network performance (an OSS improvement) they may trigger.

Conclusion

The integration of IT BSS and network OSS is inevitable. Operators can either embrace it on their own terms or wait for vendors to propose converged solutions. Getting the timing right is a critical decision for executives. They will first of all need to determine a clearly defined set of necessary capabilities, and then build a road map for this process to ensure rapid and sustainable results.

To emerge successful from this process, operators will have to take a holistic approach to BSS–OSS integration that is aligned with commercial strategy, and reject a narrow technology focus. A well-planned BSS–OSS integration program will have two principal positive outcomes. First, it allows a telecom operator to better address customer needs, and second, it allows the operator to free up funds to invest in its strategic priorities and thus be better positioned to grow.

Such capabilities will allow the business to make full use of insights generated by customer and internal data and thus help to support innovation, cost-effectiveness, and customer experience. The revamped technology function will have to involve itself in strategy development to prioritize digitization projects where they add most value — namely where the business interacts with customers. Developing a technology plan enables BSS–OSS initiatives to be used strategically. Such a plan would also make technology spending more transparent, enabling management teams to cut costs quickly, and therefore opening up opportunities for growth.

Endnotes

¹ Paul Sloan, “U.S. mobile consumers spent \$95B on data in 2012, topping what they spent on voice,” CNET News, March 4, 2013.

² Refers to 32 GB iPads. Ericsson, “Traffic and Market Report: On the Pulse of the Networked Society,” June 2012.

³ “Understanding the Arab Digital Generation,” Strategy&, 2012.

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