Dataquest Insight: OSS Market Overview and Strategic Scorecard for Vendors, 2006

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In 2006, the operations support systems (OSS) market saw players emerging and consolidation through mergers and acquisitions (M&As) worldwide, to address evolving requirements, technologies and standards. Some vendors have achieved significant market power with product suites that provide complete solutions. As a result, these vendors maintain thought leadership positions in the critical network and OSS focus areas. Among the key differentiating factors are integration capabilities, innovation and solid client relationships.

The worldwide OSS market is diversified, with many global and local players competing for market share in the various regional markets. Over the past few years, there has been an inclination toward greater concentration in some OSS markets. Vendors are seeking to expand and complement their core offerings. The current market consists of large global vendors that offer end-to-end OSS solutions, and a number of smaller vendors that offer highly specialized point solutions and products. Vendors differentiate themselves mainly by the scope of their product suites, the standards and advanced features they support, the scalability of their offerings, their ability to provide professional services, and the modularity and interoperability of their solutions.

This report analyzes the recent performance of the 11 vendors serving this market that meet our criteria, and rates each based on our vendor scoring definitions. We also provide an overall market scoring using the same definitions.

Key Findings

- Despite consolidation among larger players, the overall OSS market remains fragmented.
- Leading telecom providers worldwide have a shortlist of preferred OSS independent software vendors (ISVs) and systems integrators (SIs).
- ISVs are heavily expanding their professional services capabilities. However, they are competing with traditional SIs that implement and deliver next-generation projects, and integrate numerous complex OSS products.
- The outlook for the OSS market is positive because solutions have matured to the extent that vendors can offer comprehensive, integrated and modular packaged OSS solutions.
- Some vendors pursue a “go-alone” sales strategy at the expense of channel relationships, which may limit their growth potential with new accounts.

Predictions

- Through 2010, large telecom providers will continue to prioritize best-of-breed solutions, while midsize and small users will prefer end-to-end solutions from a single vendor.

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- Through 2007, vendor consolidation will continue. Some vendors will seek to fill solution gaps in their core markets and expand into adjacent OSS areas, while some large vendors will pursue a converged end-to-end OSS/BSS strategy.
- In 2007, vendors will differentiate themselves by the openness of their architecture, and by their ability to customize and integrate their products. The latter will be achieved either through their own professional services divisions or in conjunction with carriers' IT departments and SIs.
- Through 2008, OSS offerings will extend to Information Management Systems (IMS) and service delivery environments.

Recommendations

- OSS vendors should support carriers in their efforts to consolidate legacy OSS infrastructures and provide comprehensive integration capabilities beyond their own technologies.
- ISVs should focus on channel strategies in addition to direct sales, to enhance their business potential and long-term growth opportunities.
- Carriers should work with ISVs that either provide strong professional services or have solid relationships with SIs or network equipment providers (NEPs).
- Buyers should evaluate suppliers on their ability to customize and integrate products, as well as on their ability to provide business consulting services and financial conditions that help carriers develop new services with optimal chances of success. SIs are well qualified to take a leading role in managing the delivery and implementation of complex next-generation OSS projects. SIs have crucial methodologies and resources, and are certified for most vendor technologies.

WHAT YOU NEED TO KNOW

OSS will remain a major focus area for carriers moving toward next-generation service delivery environments. However, carriers' approaches to OSS will shift from the traditional organization in silos to fully amalgamated systems that are part of a cohesive multi-service environment. A more flexible architecture is needed to enable the creation of multiple and varied new services, which interface with adjunct systems, such as billing.

In response to these trends, vendors in the OSS market have developed their products from point applications, such as inventory management, to full product suites. NEPs in particular tend to offer OSS embedded in their IMS and service-delivery platform (SDP) product dedicated to specific services (for example, triple-play offerings that combine voice, Web access and television). Nevertheless, some product suites do not combine the best components for the market, do not comply with required standards such as IMS and SDP, lack an open architecture and may not guarantee adequate quality and performance through service-level agreements (SLAs).

Large telecom providers are looking to "future-proof" investments in OSS suites, focusing on application components and the ability to buy what they need instead of complete product suites, while addressing cross-domain service and functional demands. We expect large telecom providers to continue to select best-of-breed solutions from a limited number of OSS vendors, while small to midsize providers will prefer a complete product suite for an end-to-end solution from a single vendor. Moreover, we expect OSS suppliers to continue to provide new and expanding modules in their suites through M&As. This will lead to a consolidation of vendors with less differentiation in their product offerings and, consequently, less choice for customers.

Carriers should evaluate suppliers based on a variety of parameters, such as:

- Vendor's ability to meet operating expenditure (Opex) and capital expenditure (Capex) requirements.
- Implementation of SLAs, from services creation to quality and performance of those services.
- Adherence to evolving standards and technologies, providing interfaces to applications and databases that integrate with their products.
- Capability to provide consulting services beyond their own products.
- Financial conditions aligned with slow or even hypothetical revenue growth for new services.

ANALYSIS

The OSS market, worth $21.5 billion in 2006, is in the midst of tremendous change. Consolidation through M&As and the presence of significant new entrants provide an interesting and unique vendor and product landscape. The world's leading telecom providers want product suites and solutions from vendors that allow them to selectively invest in the components that meet their business and strategic requirements. Almost all telecom providers want to reduce the number of OSS vendors and the number of OSS products in their environments. The top requirements are evolving standards and technology, robust functionality, integration with legacy and other systems, and a "future-proof" solution. Business consulting beyond the product base is also an increasing demand.

Generally speaking, carrier requirements extend beyond network-class software to increased consulting and professional services to customize, integrate and support the customer. Most OSS software providers have set up multiple relationships with global and local SIs and NEPs to implement, integrate and support their products while expanding the breadth of their solutions.

The consolidation trend seen in the OSS market will continue through 2010. OSS product vendors will leverage SIs and NEPs to drive revenue, expand solution offerings, increase global reach and open new markets. On the other hand, ISVs are competing with traditional SIs. For end users, this will make it harder to choose between software vendors that also provide services, and SIs and NEPs that partner with ISVs. This report evaluates ISVs only.

1.0 Scope and Content of Analysis

This market overview and strategic scorecard study supplies carriers with a means to evaluate the leading OSS ISVs and make informed sourcing decisions. To be included, vendors had to meet the following criteria:

Solutions Completeness

- Inclusions
  - ISVs – Only software publishers are included.
  - Functionality – The software suite has to provide the full range of OSS functions outlined above.
- Exclusions
  - SIs that do not have their own software suite are excluded.

Solutions Scope

- Inclusions – The solution has to address both fixed and mobile carriers.
- Exclusions – Solutions that address only cable providers or ISPs are excluded.

Geographic Reach

- Inclusions – Vendors must be present in at least two geographies. One of the geographies has to be North America or Western Europe.
- Exclusions – Vendors that have no presence in North America or Western Europe are excluded.

Market Share
Vendors that meet all the criteria above are included based on their global OSS market share.

Gartner defines the OSS market as including the following modules:

- Inventory Management
- Provisioning and Activation
- Network Management
- Planning and Engineering
- Workforce Management

2.0 Overall Evaluation of Global OSS Market

The outlook for the OSS market is promising. OSS products are evolving into integrated and modular product suites that offer solutions for telecom and service providers worldwide. Apart from the products' performance and scalability, main differentiators are the ability to integrate with new and legacy systems, enhanced functionality for cross-domain networks and services, and lessening time to market. During the next two years, OSS product suites will become more robust, extending into multiple network and service management. Many suppliers have at least a decade of experience, which gives them an in-depth understanding of their customers' requirements. Equally important, however, will be the anticipation of future customer needs.

Caution should be exercised when reviewing OSS suppliers during the next three years. The acquisition of new entrants and established OSS single product and product suite suppliers will continue in 2007, consolidating the market further. This may change products and solutions, depending on the firm acquired and the strategies and market focus the acquiring company may have. Vendors' sales and market strategies continue to depend on global and local SIs to implement and support product suites. This is understandable, considering the competition and the demands for global reach. SIs and NEPs offer great opportunities for expansion into new accounts with diverse solutions.

3.0 Scorecard for Evaluating OSS Vendors

Vendors were scored on seven standard criteria used in Gartner deliverables, on a scale from 1 to 5, with 1 being the highest and 5 being the lowest. Each of the criteria is weighted, with factors 1.0, 1.5 or 2.0.

- **Criterion 1: Product and Service**
  - *Description:* Core goods and services offered by the vendor that compete in/serve the defined market. This includes current product/service capabilities, quality, feature sets, skills, and so on, whether offered natively or through original equipment manufacturer (OEM) agreements/partnerships as defined in the market definition and detailed in the subcriteria.
  - *Weight:* 1.0
- **Criterion 2: Offering (Product) Strategy**
  - *Description:* The vendor's approach to product development and delivery that emphasizes differentiation, functionality, methodology and feature set as they map to current and future requirements.
  - *Weight:* 2.0
- **Criterion 3: Market Understanding**
  - *Description:* The vendor's ability to understand buyers' wants and needs and to translate those into products and services. Vendors that show the highest degree of vision listen and understand buyers' wants and needs, and can shape or enhance those with their added vision.
  - *Weight:* 1.5
- **Criterion 4: Geographic Strategy**
  - *Description:* The vendor's strategy to direct resources, skills and offerings to meet the specific needs of geographies outside the "home" or native region, either directly or through partners, channels and subsidiaries, as appropriate for that geography and market.
  - *Weight:* 1.0
- **Criterion 5: Sales Strategy**
  - *Description:* The strategy for selling products that uses the appropriate network of direct and indirect sales, marketing, service and communication affiliates to extend the scope and depth of market reach, skills, expertise, technologies, services and the customer base.
  - *Weight:* 2.0

Figure 1. Strategic Scorecard for Operations Support Systems, 2006

Category	Amdocs	Axiom	Comarch	Comptel	HP	IBM	NetCracker	Nokia	Oracle	Syndesis	Telcordia
Overall Score	**VS**	**ST**	**ST**	**ST**	**S**	**S**	**S**	**S**	**S**	**ST**	**S**
Product or Service	S	ST	ST	ST	ST	S	ST	S	ST	ST	S
Market Understanding	VS	ST	ST	S	S	VS	S	S	S	S	VS
Offering (Product) Strategy	VS	ST	S	ST	ST	S	ST	S	VS	ST	VS
Geographic Strategy	S	ST	ST	ST	VS	VS	ST	ST	S	ST	S
Sales Strategy	S	ST	ST	ST	ST	S	ST	ST	S	ST	S
Market Responsiveness and Track Record (Business	S	ST	ST	ST	ST	S	S	ST	S	ST	S
Unit, Financial, Strategy and Organization)	S	ST	ST	ST	ST	ST	ST	ST	S	ST	ST

VS = very strong; S = strong; ST = stable; SR = some risk; HR = high risk
Source: Gartner (February 2007)

- **Criterion 6: Market Responsiveness and Track Record**
  - *Description:* Ability to respond, change direction, be flexible and achieve competitive success as opportunities develop, competitors act, customer needs evolve and market dynamics change. This criterion also considers the vendor's history of responsiveness.
  - *Weight:* 1.5
- **Criterion 7: Overall Viability (Business Unit, Financial, Strategy, Organization)**
  - *Description:* Viability includes an assessment of the overall organization's financial health, the financial and practical success of the business unit, and the likelihood of the individual business unit to continue investing in the product, to continue offering the product and to advance the product within the organization's portfolio of products.
  - *Weight:* 1.0

4.0 Strategic Scorecard for OSS Vendors, 2006

Based on the criteria outlined above, a comparison of the vendors that participated in this study gives the results shown in Figure 1. Most OSS suppliers have a strong or stable product offering and have a good track record, sales strategy and market understanding. The overall high scores reflect the fact that we selected mostly the industry leaders, and did not include the smaller vendors that compete in this space.

Overall, these scores reflect the health of the OSS market. They show that vendors have developed solid solutions and are likely to pursue a strategy of expansion to supplement their product suites and grow geographically.

5.0 Analysis of OSS Vendors' Products and Services

5.1 Amdocs

Amdocs has the most complete OSS suites in the industry, including service fulfillment, network and service management, workforce management, inventory management as well as planning and engineering tools. Amdocs provides a cohesive OSS and billing/CRM systems portfolio targeted at large carriers that want to deal with a limited number of strategic suppliers.

Its recent acquisition of Cramer has been an important strategic move to fill its solutions gap in the inventory space. We expect Amdocs to leverage the Cramer assets as a leader in next-generation inventory systems. Amdocs 7 is a genuine software suite with a dedicated road map. Over the past five years, Amdocs has invested over $600 million in developing its software. In addition to its software product, Amdocs offers comprehensive integration services, managed services and business process outsourcing (BPO). The company is dedicated to expanding into business consulting expertise and addresses carrier transformation requirements with programs tailored to the type of carrier. Its products leverage technologies and standards such as service-oriented architecture (SOA), IMS and Enhanced Telecom Operations Map (eTom). With revenue of $2.5 billion in 2006, the company has only had a net loss in three of the past 36 quarters. Amdocs products are used by most of the world's leading fixed and mobile carriers.

Figure 2.
Strategic Scorecard for Amdocs as an OSS Vendor, 2006

Category	Amdocs
Overall Score	**VS**
Product or Service	S
Market Understanding	VS
Offering (Product) Strategy	VS
Geographic Strategy	S
Sales Strategy	S
Market Responsiveness and Track Record	S
Overall Viability (Business Unit, Financial, Strategy and Organization)	S

VS = very strong; S = strong; ST = stable; SR = some risk; HR = high risk

Source: Gartner (February 2007)

However, the fact that Amdocs has a comprehensive systems integration services portfolio could limit its opportunity to grow further business through partner SIs. The emphasis on direct sales and a lesser focus on channel partner work could limit the company's ability to expand rapidly. While its full OSS solution mainly addresses large carriers, and smaller carriers may find it too expensive to implement and maintain, the modular nature of its OSS offerings means that Amdocs has continued to target smaller carriers since the Cramer acquisition. Overall, customers should be cautious about how much control of their IT and network applications and services environments they give to Amdocs, to ensure sufficient in-house expertise. As shown in Figure 2, Amdocs receives a "strong" to "very strong" scoring in all categories. Its overall score is "very strong."

5.2 Axiom Systems

Axiom Systems, headquartered in the U.K., emerged from a WAN and LAN consulting company called Connectivity Plus founded in 1989. After an initial $19 million investment from Geocapital Partners in 2000, Axiom redefined its strategy to become an inventory OSS vendor specializing in service fulfillment, and subsequently attracted funding from HgCapital. Through the acquisition of Viewgate, an Internet Protocol (IP) service validation company, Axiom Systems entered the provisioning validation market.

Its most recent product updates, in December 2006, included the addition of an Active Catalog which enables the design and creation of components to create new telecom services at the operations level. The AXIOSS suite covers the complete process of service creation and fulfillment. It comprises building blocks (operational modules and pre-configured components) which can be combined to solve the operational problems of service delivery and the technical problems of designing and creating new services. AXIOSS can be bought as an end-to-end platform to solve the larger problem of service fulfillment, or to perform separate functions like order management, service inventory and service activation.

Overall, the company enjoys relatively good market awareness and has a strong product road map addressing vital aspects of future service delivery architectures. However, it does not have a full product suite for OSS, and has only limited geographical exposure outside Europe. Moreover, Axiom Systems has limited services resources and its go-to-market strategy relies heavily on partners, such as NEPs, SIs and other technology partners. As shown in Figure 3, its overall score is "stable."

5.3 Comarch

Comarch is a $100 million Polish multi-industry IT business solutions provider. It has both pure OSS installations and OSS modules, which are added to BSS installations. Comarch's OSS suite includes network management, inventory management, trouble ticketing, fault management and other modules. An integration of OSS and BSS is planned in the near future. Comarch's products comply with new technologies and standards, such as SOA, IMS, eTom and Parlay. Comarch gets most of its OSS business from Western and Eastern Europe, the United States and Latin America. However, being located in a low-cost country, Comarch can compete on price.

The company is well positioned to serve small to midsize carriers, which are looking for integrated end-to-end solutions from a single supplier. Nevertheless, the company has recently started to gain traction with larger carriers, and has deals with O2 Germany in the network management space, and ERA Poland in the performance management area. However, the company will face tough competition to gain market share from the leading Tier 1 carriers, and outside Eastern Europe. It will need to build strong channel partnerships to facilitate growth outside its home market. Figure 4 shows Comarch's overall score as "stable."

Figure 3.
Strategic Scorecard for Axiom as an OSS Vendor, 2006

Category	Axiom
Overall Score	**ST**
Product or Service	ST
Market Understanding	ST
Offering (Product) Strategy	ST
Geographic Strategy	ST
Sales Strategy	ST
Market Responsiveness and Track Record	ST
Overall Viability (Business Unit, Financial, Strategy and Organization)	ST

VS = very strong; S = strong; ST = stable; SR = some risk; HR = high risk

Source: Gartner (February 2007)

Figure 4.
Strategic Scorecard for Comarch as an OSS Vendor, 2006

Category	Comarch
Overall Score	**ST**
Product or Service	ST
Market Understanding	ST
Offering (Product) Strategy	S
Geographic Strategy	ST
Sales Strategy	ST
Market Responsiveness and Track Record	ST
Overall Viability (Business Unit, Financial, Strategy and Organization)	ST

VS = very strong; S = strong; ST = stable; SR = some risk; HR = high risk

Source: Gartner (February 2007)

5.4 Comptel

Comptel is a specialized provider of mediation software, service provisioning, service activation and content charging solutions for traditional voice networks and advanced IP services. The company reported revenue of $106 million in 2006. Comptel completed its fulfillment solution offering by acquiring EDB's network inventory business in 2005. It occupies a strong market position in the service fulfillment space, serving around 250 carriers worldwide with a strong footprint, especially in Western and Eastern Europe. The company is considered to be one of the world's leading providers of mobile activation solutions.

We believe it will be well positioned to address carriers' needs for a next-generation communications service delivery architecture based on real-time capabilities. From a geographic point of view, the company's future strategy is to leverage its significant footprint in Europe, the Middle East and Africa into the fast-growing Rest of World regions and North America. Important strategic customers include T-Mobile, Brazil Telecom, Vodafone and O2. Comptel has strategic relationships with a number of SIs, which run Comptel competence centers.

T-Systems has a special status as a long-term partner with Comptel, playing a key role in delivering complex projects to Deutsche Telekom. Comptel should pursue further global alliance agreements with integration partners to expand its footprint in other regions. Sales via partners currently account for only 25% of its overall revenue. Figure 5 shows Comptel's overall score as "stable."

5.5 HP

U.S.-based HP has a strong global focus providing hardware, software, services and solutions to the telecom industry. Its OSS product portfolio focuses on HP software products that address life cycle management, fulfillment and assurance as well as Integrated Service Management (ISM) framework solutions encompassing OSS and BSS automation. However, the largest chunk of HP's overall OSS revenue comes from its network and service management business, while other OSS areas are covered via partnerships.

HP has a large customer base worldwide, with emphasis on the wireless and wireline markets and some presence in the cable industry. It has a strong offering for carriers and service providers looking for solutions to address convergence, triple-play, value-added services and the complete life cycle to service desk environment. HP's ISM is a framework solution that leverages HP software and partners to create solutions. However, services do not always cover the partner's product. Customers will need to be actively involved in the partner and associated product selection, validation, functional and technical processes to ensure solutions meet the requirements and specifications of their IT and business models. Overall, the HP score is "strong," as shown in Figure 6.

5.6 IBM

IBM's service assurance management strategy is to provide comprehensive solutions, across both IT and operations, that enable carriers to speed time to market, ensure quality of service and reduce operational costs. The combination of IBM's Tivoli, Micromuse's Netcool and Vallent's wireless service and performance management products amalgamate to form a powerful and comprehensive suite of service assurance functionality across network domains and discrete network environments.

With its recent acquisition of Vallent, IBM complements its real-time and event-based service assurance approach, mainly rooted in the fixed line and IP markets, with strong wireless functionality and customer-centric service assurance capabilities. As a leading service assurance provider with over 300 installations worldwide, Vallent has been formed from numerous mergers and acquisitions, including those of WatchMark, Comnitel and ADC Metrica. This consolidated offering provides a much stronger and deeper solution suite for customers worldwide that need to enhance and manage their networks and infrastructures, not just in the vertical but throughout the enterprise. IBM products use technologies and standards like SOA, IMS and configuration management database (CMDB) to achieve solutions, along with strong partners.

Figure 5.
Strategic Scorecard for Comptel as an OSS Vendor, 2006

Category	Comptel
Overall Score	**ST**
Product or Service	ST
Market Understanding	S
Offering (Product) Strategy	ST
Geographic Strategy	ST
Sales Strategy	ST
Market Responsiveness and Track Record	ST
Overall Viability (Business Unit, Financial, Strategy and Organization)	ST

VS = very strong; S = strong; ST = stable; SR = some risk; HR = high risk

Source: Gartner (February 2007)

Figure 6.
Strategic Scorecard for HP as an OSS Vendor, 2006

Category	HP
Overall Score	**S**
Product or Service	ST
Market Understanding	S
Offering (Product) Strategy	ST
Geographic Strategy	VS
Sales Strategy	ST
Market Responsiveness and Track Record	ST
Overall Viability (Business Unit, Financial, Strategy and Organization)	ST

VS = very strong; S = strong; ST = stable; SR = some risk; HR = high risk

Source: Gartner (February 2007)

Figure 7.
Strategic Scorecard for IBM as an OSS Vendor, 2006

Category	IBM
Overall Score	**S**
Product or Service	S
Market Understanding	VS
Offering (Product) Strategy	S
Geographic Strategy	VS
Sales Strategy	S
Market Responsiveness and Track Record	S
Overall Viability (Business Unit, Financial, Strategy and Organization)	ST

VS = very strong; S = strong; ST = stable; SR = some risk; HR = high risk

Source: Gartner (February 2007)

Figure 8.
Strategic Scorecard for NetCracker as an OSS Vendor, 2006

Category	NetCracker
Overall Score	**S**
Product or Service	ST
Market Understanding	S
Offering (Product) Strategy	ST
Geographic Strategy	ST
Sales Strategy	ST
Market Responsiveness and Track Record	S
Overall Viability (Business Unit, Financial, Strategy and Organization)	ST

VS = very strong; S = strong; ST = stable; SR = some risk; HR = high risk

Source: Gartner (February 2007)

While its OSS portfolio covers broad performance and service management capabilities, service fulfillment functionalities are missing. Customers should ensure that partner products and selection processes meet their standards and requirements. Tivoli invests heavily to provide integrated solutions through a program of over 300 partners, and IBM Global Services has supporting standards via its active participation in the TeleManagement Forum and the International Telecommunication Union. We expect IBM to leverage its professional services expertise to take a primary role in OSS transformation projects and next-generation communications service delivery projects. IBM's overall score is "strong," as shown in Figure 7.

5.7 NetCracker

The privately held U.S. company NetCracker provides a service fulfillment product suite centered on network resource management and inventory systems, and has reported significant carrier wins. With revenue of around $100 million in 2006 (expected to double in 2007), the company has moved into the higher ranks of this market. It has grown from 300 employees in 2003 to 1,100 employees in 2006. Major wins with the recent France Telecom and Sprint deals are expected to increase the company's employees to 2,000.

In contrast to its competitors, NetCracker aims to address systemic problems at the service layer (fulfillment and provisioning) and provide a complete solution involving applications and services, rather than integrating with other applications and relying on SIs to deliver the solution. As a result, NetCracker's offerings are more attractive to carriers in emerging markets, although NetCracker has had increasing success with larger Tier 1 and Tier 2 carriers. The company gets around 45% of its revenue from Western and Eastern Europe and the Middle East, and 40% from North America. It has taken advantage of the emerging Eastern European market to establish itself as the region's leading fulfillment vendor, and its acquisition of Russian integrator AVD further enhances this position.

In the past, the company had a go-it-alone approach with little marketing activity, which isolated it from potential channel partners. As a result of growing demand for its applications and solutions, NetCracker has become more proactive, using partners to deliver its solutions since 2006. However, it needs to establish stronger partnerships to enable it to enter other emerging markets, like some of the Asian markets, where NetCracker's solution is otherwise a good fit. NetCracker has a solid market understanding and its score overall is "strong," as shown in Figure 8.

5.8 Oracle

At the end of 2006, Oracle completed its purchase of MetaSolv, a leading service fulfillment provider. The acquisition was an important strategic move for Oracle, enabling it to expand beyond its core billing and CRM business into the OSS market. MetaSolv has been a leading provider in all major service fulfillment markets, complemented with billing mediation capabilities. Its main footprint has been in the inventory, activation and provisioning space. Historically, the company had a strong track record with competitive local exchange carriers (CLECs) in North America. In 2002, MetaSolv acquired Nortel's OSS assets, which provided mature products suited to the Tier 1 and mobile markets. It also extended MetaSolv's customer base outside North America. In 2003, MetaSolv acquired U.K.-based Orchestream, a provider of IP provisioning solutions, to address the complex and developing IP market.

We expect that MetaSolv will be able to use Oracle's extensive channel partners and worldwide sales network. Oracle's end-to-end offering of a communications service delivery architecture creates a strong message in the market. This holistic proposition amalgamates MetaSolv's OSS assets with Oracle's BSS/CRM solution, integrated with essential service delivery, middleware and DBMS components. Oracle shows a strong commitment to providing an integrated solution from CRM to service fulfillment and assurance, and to billing and revenue assurance. Oracle's Fusion Middleware strategy delivers a coherent, integrated solution based

Figure 9.
Strategic Scorecard for Oracle as an OSS Vendor, 2006

Category	Oracle
Overall Score	**S**
Product or Service	ST
Market Understanding	S
Offering (Product) Strategy	VS
Geographic Strategy	S
Sales Strategy	S
Market Responsiveness and Track Record	S
Overall Viability (Business Unit, Financial, Strategy and Organization)	S

VS = very strong; S = strong; ST = stable; SR = some risk; HR = high risk

Source: Gartner (February 2007)

Figure 10.
Strategic Scorecard for Nokia as an OSS Vendor, 2006

Category	Nokia
Overall Score	**S**
Product or Service	S
Market Understanding	S
Offering (Product) Strategy	S
Geographic Strategy	ST
Sales Strategy	ST
Market Responsiveness and Track Record	ST
Overall Viability (Business Unit, Financial, Strategy and Organization)	ST

VS = very strong; S = strong; ST = stable; SR = some risk; HR = high risk

Source: Gartner (February 2007)

on open industry standards and SOA. With the stated intention to provide packaged applications to the communications market, Oracle's strategy will involve a large SI and partner network. However, its business model as a product company implies that its success depends heavily on the integration and consulting expertise of its partners.

Over the next 18 months, customers should monitor the effect of the MetaSolv acquisition on its products and the overall integrated solutions that Oracle will aim to provide. Figure 9 shows Oracle's overall score as "strong."

5.9 Nokia

As a world leader in mobile network infrastructure systems, Nokia's strength in the mobile market has expanded into the OSS area. OSS is of strategic importance to Nokia and a fundamental part of its overall value proposition to carriers. Its OSS product portfolio is primarily centered on its NetAct platform. NetAct also provides network and domain management for Nokia's mobile network equipment. The product has been deployed in around 400 installations in major markets worldwide.

Nokia collaborates with a wide range of major technology providers and SIs in all markets worldwide. The company has its own business consulting and SI divisions. Although the planned merger between Nokia and Siemens is currently on hold, once the deal is through, we expect the newly formed company, Nokia Siemens Networks, to increase its commitment to the OSS market, as a product and solutions provider. Nokia has a strong multivendor OSS offering combined with a growing carrier services business based on OSS systems integration and consulting services. Siemens would bring additional strong professional services expertise. NetAct is likely to be adopted as the platform for any future electronics manufacturing service (EMS), domain manager or OSS development. Customers should carefully evaluate the evolution of the company's new OSS strategy over the coming 12 months, to gauge the effect the acquisition will have on its offerings. Figure 10 shows Nokia's overall score as "strong," although it is ranked as a market follower in some categories.

5.10 Syndesis

Canadian vendor, Syndesis has a strong service fulfillment product portfolio with a particularly strong presence in the complex area of service provisioning and activation. In 2005, Syndesis acquired the data integrity management startup, CoManage, for expansion beyond its traditional provisioning system sector.

Originally targeting CLECs and other CSPs in North America, the company has now won significant business with major Tier 1 carriers, mainly in North America and Western Europe, such as AT&T, Bell Canada, Cingular, Verizon Business, Qwest, Sprint, Swisscom, Telecom Italia and Telefonica. Syndesis' revenue topped $100 million in 2004 and it had trailing 12-month revenue of $45 million, as revealed by assurance specialist Subex Azure, which announced in January 2007 its intention to acquire Syndesis. Major wins last year came with multi-year, multi-million dollar license agreements for discovery and reconciliation as part of Telstra's IT transformation project and across BT's 21st Century IP-based network.

Syndesis announced a four-year contract worth around $20 million with Telecom Italia for the software components for a new solution for Ethernet, virtual local-area network (VLAN) and Multiprotocol Label Switching (MPLS) services. Subsequently, the company has been selected as the provisioning solution in the Internet Protocol TV (IPTV) deployments at four Tier 1 service providers, and was also selected as the provisioning component of Alcatel-Lucent's IPTV reference architecture. Once the acquisition by Subex Azure is completed, the combined company will provide an integrated service fulfillment and revenue assurance offering. This value-added proposition will, in turn, create new opportunities for the company.

Overall, we expect Syndesis to continue its winning streak, although customers should monitor the impact of the acquisition on the products and integrated solutions that the combined company will offer. Syndesis scores as "stable" in most categories, as shown in Figure 11.

5.11 Telcordia

Telcordia is one of the world's largest suppliers of OSS solutions and services. The $1 billion company, headquartered in Piscataway, U.S., covers all OSS solutions areas as defined in this report. Telcordia was acquired by Warburg Pincus and Providence Equity Partners in March 2005, ensuring strong financial backup and viability. In 2004, Telcordia filled a major gap in its OSS portfolio, by acquiring Granite Systems, a leading supplier of inventory systems.

Its "elementive strategy" makes individual components available as stand-alone products, enables integration with non-Telcordia OSSs and ensures coexistence in a legacy OSS environment. It recently launched the Device Director product, which complements its robust performance and service management portfolio.

The company continues to invest in key growth segments, such as fulfillment, IMS and service delivery platforms, hosted solutions and other next-generation products. Its service delivery solution is well positioned to supply Tier 1 providers, broadband providers and MVNOs with the flexibility, scalability and performance requirements of next-generation communications service delivery architectures. Currently, the company's strongest growth is in its services, mobile and broadband business. The largest part of its revenue comes from North America.

Besides leveraging existing customer relationships, Telcordia has expanded its geographical presence and extended its partnerships with local consultancies and SIs in emerging markets. Its global strategic alliance with Accenture, announced in mid-2006, has already resulted in customer wins, such as Telemar. However, the company will rely heavily on partnerships and a viable go-to-market strategy to further its success and to expand into new markets. The overall score for Telcordia is "strong," as shown in Figure 12.

APPENDIX A: DEFINITION OF OSS MARKET

Gartner defines the OSS market as follows:

- **Inventory** – tracks and manages network assets. In this ongoing process, installed and "on-hand" network assets are tracked for efficient inventory, procurement, repair and reuse.
- **Provisioning and Activation** – Includes systems and steps related to the process of implementing orders for customers.
- **Network Management** – Includes configuration, traffic, fault, security, element and performance management.
- **Planning and Engineering** – Includes the steps from network planning to construction (for example, budgeting, procurement, and line and service testing).
- **Workforce Management** – Encompasses activities surrounding work assignment, coordination and tracking. The process involves ensuring that personnel with the appropriate qualifications are given the correct equipment at the right time and place. Examples of IT applications and systems supporting workforce management are dispatch, workflow management and project tracking.

Figure 11.
Strategic Scorecard for Syndesis as an OSS Vendor, 2006

Category	Syndesis
Overall Score	**ST**
Product or Service	ST
Market Understanding	S
Offering (Product) Strategy	ST
Geographic Strategy	ST
Sales Strategy	ST
Market Responsiveness and Track Record	ST
Overall Viability (Business Unit, Financial, Strategy and Organization)	ST

VS = very strong; S = strong; ST = stable; SR = some risk; HR = high risk

Source: Gartner (February 2007)

Figure 12.
Strategic Scorecard for Telcordia as an OSS Vendor, 2006

Category	Telcordia
Overall Score	**S**
Product or Service	S
Market Understanding	VS
Offering (Product) Strategy	VS
Geographic Strategy	S
Sales Strategy	S
Market Responsiveness and Track Record	S
Overall Viability (Business Unit, Financial, Strategy and Organization)	ST

VS = very strong; S = strong; ST = stable; SR = some risk; HR = high risk

Source: Gartner (February 2007)