A large, abstract graphic on the left side of the page, consisting of overlapping, semi-transparent, curved shapes in shades of gray and white, creating a sense of depth and movement.

**EFFICIENCY IN SERVICE DELIVERY:
SELECTIVE OUTSOURCING APPROACH
REDEFINES BUSINESS VALUE**

Sun Managed Operations Services
White Paper with Case Studies
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Introduction

IT Service Delivery Evolves

When an enterprise relies on outsourcing for select components of its IT operations, it is critical that the service provider employs an efficient delivery model. Such a model encompasses a process-driven yet adaptable approach that delivers maximum performance along with reduced operating costs. The foundation of an efficient service delivery model is the interconnection of tools, resources, and processes.

As IT service delivery evolves and more outsourcing options are available to businesses of all sizes, these efficiencies are becoming increasingly critical to meeting the diverse demands of the outsourcing market. Historically, outsourcing options for meeting skill or technology gaps were all or nothing—companies had to hire someone internally or dole out major portions of their operations. While traditional full-service outsourcing works for larger organizations, midtier companies often need something more adaptable and efficient. And with offerings such as Sun Managed Operations Services, clients now have the flexibility to achieve this business value while maintaining as much internal control of their systems as desired.

Redefining the IT Lifecycle

Demand for new application development and integration evolves with business requirements. The classic IT operations lifecycle built on 'design, build, run' can no longer effectively meet the complexities of IT operations management. Many organizations, which have IT operations driven by both new and end-of-life technology, are not able to hire all of the expertise required to effectively manage their infrastructure, applications, and network. To address these complexities, outsourcing providers are taking a new approach to the 'run' component of the lifecycle.

An effective service delivery model is process-oriented and adaptable to business requirements, which may include increased network availability or proactive management and maintenance of a mission-critical application. This proactive component should not be overlooked because the ability to address issues before they impact the organization is critical when technology drives business performance.

Sun Managed Operations Services

Sun Managed Operations Services provide a scalable technology solution that satisfies the diverse and complex infrastructure requirements of global enterprises. Customers may use: enterprise applications such as Oracle eBusiness Suite, SAP, PeopleSoft, and Siebel; web server applications including Sun Java™ Enterprise Server and BEA WebLogic; and custom developed, client-server and web-based applications. With a focus on the predictive management of applications, infrastructure, networks, and security systems, Sun Managed Operations Services provide a structured set of operations management functions that deliver 24/365 maintenance, administration, tuning, and optimization.

The processes, tools, and technologies Sun uses to deliver against these operations management functions

have been refined based on Sun's experience in managing high-traffic, transaction-intensive, event-driven application environments. Through a predictive management approach and proprietary knowledgebase, Sun identifies and resolve issues before they affect business.

Sun Managed Operations Services provide complete support for:

- Incident notification, diagnosis, and resolution
- Change and problem management
- Asset management
- Fault and performance monitoring
- Maintenance administration
- Security management
- Patch management
- Operations and performance reporting
- Tuning and optimization
- Migration
- Server consolidation
- Security audits

How It Works

The foundation of an efficient service delivery model is the interconnection of tools, people, and processes. But how do these components work together to deliver value? Sun's model provides a notable example of this interconnection. SevenSpace (now Sun Managed Operations Services), a company acquired by Sun in January 2005, built a selective outsourcing delivery solution that has proven its value to more than 100 clients worldwide. This delivery framework offers clients as much control over their operations as needed with complete insight into their systems and infrastructure. In addition, an assigned Client Service Manager is responsible for helping to ensure the customer is receiving the right services to meet their business needs while helping maximize the performance of the managed environment.

The Sun Managed Operations Services delivery framework is the interconnection of the following four components:

ControlTower

Once an organization selects which applications and/or infrastructure to outsource, Sun installs an intelligent agent, the ControlTower, onto each managed environment. This proprietary technology is equipped to gather performance information to monitor nearly any piece of infrastructure, anywhere in the world. Once the ControlTower captures this data, it is transmitted to the ControlCenter via an encrypted private connection.

ControlCenter

Sun's ControlCenter is a 24/7 operations hub staffed with analysts who manage and monitor operating environments worldwide. ControlCenter analysts have a diverse array of skill sets, from core database administration to web administration to operating system administration. A wide array of expertise therefore

becomes available to clients at a fraction of the cost of hiring these resources internally.

When an incident occurs that may cause performance interruption or degradation, it is classified at one of three severity levels. This classification system is designed to efficiently manage any type of event, prioritizing the response for minimal impact to a client's operations. Sun notifies clients of all incidents that occur within minutes of the incident's occurrence, then rapidly and effectively works towards remediation. The ControlCenter analysts resolve the majority of issues using ControlBase, a proprietary knowledgebase.

ControlBase

ControlBase provides proven validation and remediation steps for incidents occurring within a wide variety of applications and infrastructure. Currently holding more than 1,400 individual remediation procedures, ControlBase's breadth of solutions is continually growing to incorporate newly identified, proven fixes.

When ControlBase does not contain the steps needed to resolve an incident, Sun engages its second line of support engineers. These resources include BEA Certified Administrators, Microsoft Certified Systems Engineers (MCSE), Certified Information Systems Security Professionals (CISSP), Cisco Certified Internetwork Experts (CCIE), Sun Solaris™ 10 Operating System (OS) Certified Engineers, as well as other industry-leading experts. These engineers resolve the most challenging incidents and incorporate their solutions back into ControlBase. In this manner, Sun leverages proven, innovative remediation solutions across a wide client base.

ControlPoint

By resolving incidents and gathering performance data, Sun gains insight into client systems and analyzes them for optimization. Clients can access this information for themselves through the ControlPoint management portal. ControlPoint generates hundreds of trending and status reports that cover applications, networks, and servers.

Using a drill-down navigation system, customers can quickly find the device or application in question. ControlPoint generates reports on demand and renders them as easy-to-read graphs based on user-selected criteria.

Case Study: TWI Interactive, Inc.

TWI Interactive, Inc. (TWI) is the digital media and technology arm of IMG Worldwide, the world's premier sports and entertainment marketing and management agency. IMG employs almost 3,000 people, and the company is involved in an average of nine major events around the world everyday. TWI produces, manages, and distributes more than 5,000 hours of programming to more than 200 countries worldwide, making it the largest independent producer and distributor of sports programming in the world. The company also delivers content services across the web, mobile/wireless, and television. Headquartered in Boston, Massachusetts, TWI has production facilities in Boston and London, a global hosting network infrastructure with primary operations in Sterling, Virginia, and business offices in all major North American, European, and Asia-Pacific cities.

TWli prides itself in being a leader in innovative applications of technology to enhance sports fans' viewing experience. The company was the first to develop a content management platform for sports rights owners to publish their own digital content on the Internet. The company represents the interests of the world's preeminent athletes, including Tiger Woods and Venus and Serena Williams, and leading event sites, including Wimbledon.org.

Business Problem

While many organizations can tolerate a 15-minute outage, 15 minutes of downtime during a 90-minute soccer game is simply unacceptable. This motivated TWli to strive for TV-quality service for their web-based users. As John Watson, Vice President of Business Development, said "You expect to turn the TV on and get a picture. You don't expect to turn the TV on and have to hit reload on your browser until you get a picture."

To achieve this higher level of service in a technology-intensive business, TWli leaders knew a quantum leap was required. Yet it was essential to minimize the financial costs and risks of taking this leap. The company determined that it would have to make a significant investment to continue internally managing web and mobile assets as a 24/7 operation so they could seize opportunities in markets primed for growth. It was time to consider some alternatives to leverage company assets more effectively.

"Our focus was on the end result," said Watson. "We wanted to stay focused on our core business rather than get sidetracked on the support systems. When you support events with a fixed date, such as the British Open, either you deliver services for the event or you miss it. The available resources become a big factor of whether you pursue the business or not. Speed to market is very important for us. We would make it, but wondered how many deals we were missing because we were consumed with the one at hand. Ideally, we wanted to add incremental clients and incremental costs, not huge investments in fixed costs. We wondered how to take that big leap without spending a lot of dollars today."

Requirements

TWli's heavily trafficked client websites must accommodate up to 200 million page views per day with rich streaming media content delivered across multiple technology platforms and wireless networks. Any alternative to a traditional, internally provided solution must handle unique technical support demands due to the excessive traffic peaks associated with high-profile events, as well as maximum traffic levels on a routine basis. In addition to managing the day-to-day operations of these critical sites, TWli needed to continue to provide the guaranteed levels of service that its event-driven clients, such as the British Open, have come to expect. Loss of revenues and brand erosion associated with downtime were intolerable, making proactive management of custom content, network, and application operations imperative. An essential requirement became the ability to identify and resolve issues before they affected performance.

"We wanted to stay focused on what was core to our business, find a way to remove a part of the task that was not core to us," said Watson. TWli sought quality operation management services that were broader and faster than it could deliver in-house. Furthermore, these service levels had to be consistently high in many different time zones. With substantial business on the east coast of the United States, Australia, Singapore, Japan, and other countries, TWli needed an alternative that truly worked worldwide.

The question was, could a vendor understand their business, be nimble enough to move quickly, and deliver—while still providing scalable services and a high level of support? “We needed a depth and breadth of skills, plus a rapid implementation,” said Watson.

Approach

First, TWli conducted an extensive cost-benefit analysis, and considered a range of options, from insourcing to total outsourcing. A breadth of service was needed to address the company’s heterogeneous web infrastructure and its Virtual Private Network (VPN) link. The vendor of choice would need to demonstrate the ability to work with multiple carriers and provide solid help desk functionality so problems could be easily tracked and resolved. Only a few providers had the breadth of service TWli needed. “We spoke to them individually, invited them to come in and perform due diligence within our infrastructure,” said Watson.

The company chose Sun Managed Operations Services to remotely manage its hosting operations. TWli managers agreed that Sun’s advanced management platform, technical expertise, and operating processes would simplify operations and lay the groundwork for long-term growth. The interworking of these three components is critical to the Sun solution. The management platform features innovative remote technology that enables Sun to access TWli’s systems worldwide through a secure VPN. This information is transmitted back to Sun’s ControlCenter in Ashburn, Virginia, where the shared team proactively analyzes the data and immediately reacts to any incidents. This shared support model combines both Sun and TWli resources, something that Sun had never done before, but did to accommodate TWli’s business needs. This cooperative support model allows TWli to manage specific elements of their environment around the application layer, while Sun manages the hardware, web infrastructure, and operating system.

Additionally, TWli believed that the Sun Managed Operations Services team’s strong international experience was another important factor. And the added bonus—Sun could complete the migration within 60 days.

Results

A smooth transition soon followed, with seamless, flexible service and support provided to TWli clients. TWli relies on Sun’s shared support model, which includes tools, technologies, and expertise in a shared operations center. TWli gains access to depth of technical skills and the use of efficient operational processes, resulting in better performance for its Internet operations. Because it shares resources with other Sun Managed Operations Services clients, TWli also enjoys lower operating costs and the ongoing management support required to scale with the growth of their own business. By relying on Sun’s deep bench expertise, TWli can offer new and innovative services to current and future clients that would have required a substantial investment in fixed assets. It benefits from the inherent strengths of having shared access to top notch technical and consulting resources.

Sun now manages all of TWli’s global web applications and infrastructure, including more than 45 Internet sites and TWli’s 3G* services in Europe, Australia, and the Far East. “This frees up our other resources to focus on getting new business and keeping customers happy rather than getting operationally ready,” said Watson.

* 3G services outside the United States refer to video, typically soccer, rugby, cricket, or other sports events highlights or clips in near real-time or near-live, delivered to 3G-enabled phones.

“One of the big opportunity cost questions we’re starting to explore now is how much more competitive we can be. That’s the upside of this deal. Now, the time to market is a lot faster. We’ve added a lot of new clients in the past few months,” said Watson. “In the future, I see us jointly competing for new business. We have quite a few initiatives on the table before us that neither of us would have gone out and pitched on our own.”

Case Study: The Carlyle Group

The Carlyle Group is a global private equity firm with more than \$16 billion under management. The firm employs more than 500 people in 12 countries. This global franchise invests in buyouts, real estate, high-yield, venture and turnaround in Asia, Europe and North America, focusing on a number of industries, many of which have a regional component. The Carlyle Group distinguishes itself from smaller boutique private equity investment firms by providing both global reach and depth of expertise in local markets. The Carlyle Group generates extraordinary returns for its investors by employing a conservative, proven, and disciplined approach.

Business Problem

When David Roth joined the company in April 2001 as Vice President of IT, The Carlyle Group's technology infrastructure was decentralized. Each of the 21 offices had independent servers and email systems, and reliability, stability, and systems performance were at an all-time low. “Our offices are downtown in Washington, D.C., right next to the FBI building. A driving force in our strategy was the 9/11 issue—we knew we needed to have adequate backups, get the old email system out, and move to a top-notch environment,” said Roth.

Lack of a firewall and help desk, Internet access issues, viruses, and cabling concerns presented major productivity issues for the firm’s employees. The company determined that it needed to invest in its own IT infrastructure to provide the caliber of service the market expects of a top-notch investment firm. Hardware, operating systems, and critical applications needed immediate attention.

The server room had no computing hub, and systems were inconsistent and inadequate for a global investment firm with 24/7 operations. The lean IT team of application developers and engineers had just 18 people focused on IT worldwide, all of whom answered help-desk type calls. There were no call logging systems or Service Level Agreements (SLAs) in effect, causing many distractions for both IT and users. Operating systems were inconsistent, and included NT, Novell, and Windows 2000 servers. Desktop configurations were also inconsistent, and included Windows 95, 98, and 2000. It became clear that the Washington, D.C. headquarters and the email application were the places to start with basic performance improvements.

“Our email application is critical to our deal teams, which operate on tight deadlines,” said Roth. “Reliability is especially crucial there, because losing out on a deal can mean a missed window of opportunity.” Roth knew he would never be able to afford a large IT staff, so his team began evaluating options.

Requirements and Approach

The team began to learn the business requirements. First, an RFI was sent to 15 hosting and service providers. Information was carefully reviewed, and next an RFP was sent to seven companies. Two finalists emerged—Sun Managed Operations Services and a large full-service outsourcing solution provider.

The Carlyle Group's IT team then carefully evaluated each company's offerings, spoke with reference customers, visited the vendor locations, and asked for best and final presentations. The IT steering committee, which consisted of managing directors from around the firm, then heard the final presentations.

"The steering committee unanimously decided to go with Sun's Managed Operations solution," Roth said. "We all felt that the Sun team was in a better position to deliver the responsiveness that we needed. We like that we can access their experts quickly—that's critical to us."

The Carlyle Group team considered the importance of ease of working with their vendor. Having compatible corporate cultures was important to their success. "The Sun Managed Operations Services team has become an extension of our IT department. Their flexibility is exactly what we need," said Roth. "Sometimes we are the first to ask Sun to do certain things, such as email content filtering and Citrix implementation architectures. The Sun team responds by researching our need, and working to address it. We've never had any second thoughts about our decision."

Results

Infrastructure

The Sun Managed Operations Services team designed The Carlyle Group's system using SQL server boxes and Citrix technology to provide remote access to users with low bandwidth connections to Microsoft Office and files stored on The Carlyle Group's network. The corporate accounting system was moved to the Citrix interface, along with the HRIS, the new fund accounting system. Several internally-developed business applications have been transitioned to Sun Managed Operations Services. Blackberry is an important application too, so the team tied it to the email application. Migration is underway to an investment fund accounting system.

Three years later, The Carlyle Group has expanded its scope of work with Sun to include migration of the corporate messaging network from Microsoft Exchange 2000 to Microsoft Exchange 2003. All servers associated with the messaging system will also be upgraded. In addition, Sun will manage the security of this system, including virus control necessary for messaging integrity. The Carlyle Group's unified messaging system incorporates email, voicemail, fax, and Blackberry functionality. Since 2002, SevenSpace has managed the United States implementation of the Microsoft Exchange network to 99.9 percent availability.

Sun is working with The Carlyle Group to expand an international VPN for remote users across three continents. The VPN is being enhanced to facilitate end user access to all corporate data while working remotely around the world.

The Carlyle Group now has consistency with Windows 2000 on all servers, which are Compaq DL380 models with consistent builds. All 21 offices are connected by VPNs. "The Sun team has been instrumental in design

and implementation of this new system, with a redundant infrastructure and network. While we were not placed under any deadline by management, we knew we were living on borrowed time.”

Applications

The Carlyle Group relies on a number of applications to support its operations. For portfolio management, the firm migrated to a third-party solution, and some internally developed systems remain. One business-critical system is the deal log, a Java™ technology-based application with an SQL back end. There is a customized knowledge management (KM) system based on top of a KM tool, along with a small-scale application that tracks company and employee investments. Additionally, the company has real estate fund systems, which track detailed operating expenses and rental fees associated with properties. The Sun Managed Operations Services team supports this environment with diversified SLAs designed to meet the needs of The Carlyle Group.

Today, Sun provides proactive security enhancements to The Carlyle Group’s IT systems, implementing ongoing security patches and performing ongoing security audits. Standard anti-virus protection is in place, with 24/7 monitoring and management of the core infrastructure. The company has also migrated to a standard firewall.

Customer Satisfaction

Now, with better infrastructure, security, and applications in place, customer satisfaction is much higher in The Carlyle Group's IT department, thanks to training and a good help desk arrangement. The company has a dedicated service desk with problem tracking and published SLAs and will soon implement a global 800 service desk phone number that will activate at either the London, Washington, or Hong Kong service desks depending on the time of day.

“If we had to staff this internally, the costs would be high,” said Roth. “Perhaps more importantly, it would also be difficult for us to attract and retain the expertise needed to keep these systems going.” It is efficient because these skills sets are leveraged across multiple clients, so The Carlyle Group doesn’t have to invest the money to get them all in house. He added, “My advice would be: don’t underestimate the level of effort that will be needed. Our selective outsourcing strategy takes away so many headaches for us. We found a partner that was a good cultural fit for us. Sun is responsive. The most significant benefit is the access we have to highly motivated engineering resources and processes. We can access specialized skills and dedicated personnel to address issues as they arise—anytime, day or night. And, Sun’s change management process has helped us implement the discipline without developing a policy and system of our own.”

Selective Outsourcing Gains Popularity

The Carlyle Group engagement clearly demonstrates the success of a flexible, efficient service delivery model for selective outsourcing. Selective outsourcing provides a highly efficient way to maximize technology investments and improve performance. Instead of taking on staff and assets on behalf of a client, this efficient, innovative approach assumes specific responsibility for discrete IT functions. The specific functions selected depend on an organization’s goals and needs. It is popular with organizations that need to avoid sinking resources or time into a function currently done in house or offload responsibility for a new function where there is a skill or resource shortfall.

Meanwhile, TWIi opted for a more comprehensive outsourcing solution. The Sun Managed Operations Services team took control of the company’s entire web operations for a rapid return on investment and increased operational efficiencies. Using the same delivery model, Sun was able to accommodate the diverse needs of the two enterprises. This adaptable model is critical in offering organizations options for retaining staff and assets, gaining flexibility, increasing systems performance, lowering operating costs, and preserving a sense of control over operations.

Enterprises and organizations with varying operations management needs are taking advantage of Sun’s adaptable delivery model. From network management to ERP management (see Figure 1 below), this model allows the client to maintain as much control over their operations as is strategic.

Tailored Solutions Across the Service Spectrum

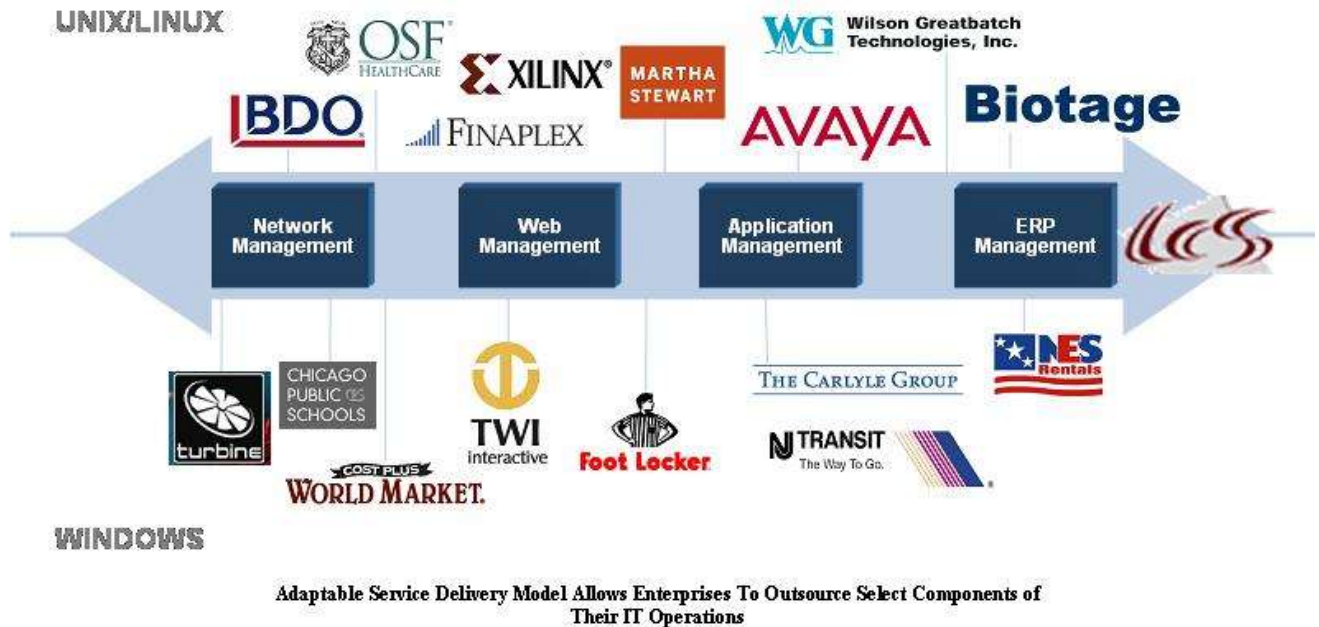


Figure 1: Adaptable Service Delivery Model

Weigh the Alternatives

A flexible service delivery model provides choices. The question is, how much of the IT function can or should

be outsourced? Companies need to weigh whether immediate financial benefit is needed for the bottom line. Full-service outsourcing reduces headcount and assets from the books and provides immediate access to specialized expertise. Sun does the latter, but the question of headcount depends on the choices made by the organization. It's important to try to anticipate changes in business and strategic goals over this time, so that services can be adapted. Organizations should make sure there is a clear, simple process for making contract revisions to update the scope or otherwise adapt services over time.

Next, organizations need to look at themselves objectively and determine whether it is frequently necessary to adopt new technologies. They should compare how easily can this be done using insourcing, selective outsourcing, or full outsourcing.

Finally, companies should consider their operational behavior. Is there a clear understanding and good documentation of how the IT group functions? Are maintenance and administrative tasks well documented?

Summary

Both TWli and The Carlyle Group leveraged Sun's strengths in entirely different ways to achieve efficiencies. TWli is using Sun Managed Operations Services for its entire operations, while The Carlyle Group is contracting out specific functions. Both gained increased systems performance and returns on investment. TWli gained focus and capacity, while The Carlyle Group achieved integration, consistency, and processes that work. Both companies enjoy having immediate access to experts who are committed to their success, rather than face an intensive, time-consuming search for qualified, expensive, hard-to-find experts. They benefit from access to tools and a robust, multimillion-dollar platform that is properly maintained by an outsourcing partner. Perhaps most importantly, both companies can take their best people and target their energies in ways that help their organizations leverage technology in more valuable or strategic ways.

Whether the goal is to move IT operations staff out of firefighting mode, grow the business, fill gaps in IT teams, or take advantage of new technologies, selective outsourcing enables information technology to be seen as a potential revenue-generating area. It is an excellent option for companies seeking alternatives to total outsourcing and insourcing solutions.