SYNTEL, A U.S.-BASED IT SERVICE PROVIDER WITH AN EXTENSIVE GLOBAL DELIVERY SERVICE, SUGGESTS SPECIFIC BEST PRACTICES FOR REDUCING COSTS AND IMPROVING BUSINESS PERFORMANCE GLEANED FROM HUNDREDS OF APPLICATION MANAGEMENT ENGAGEMENTS AMONG GLOBAL 2000 COMPANIES.

Optimizing Application Management Outsourcing:
Best Practices to Reduce TCO and Increase Business Value
Most Global 2000 corporations have outsourced some or all of their application management activities to one or more offshore suppliers. With the first generation of outsourcing’s initial goals of cost reduction and system stability achieved, it is time to take the next step to further reduce costs and improve business performance. Here, Syntel explores its best practices gleaned from hundreds of production support engagements to do just that.
INTRODUCTION

Global outsourcing is an increasingly important option for Global 2000 companies to reduce the costs of application management. According to industry experts, as much as 75 percent of an IT budget is allocated to application management—all the more reason to reduce it!

The worldwide market for application management services is expected to grow at an overall compound annual growth rate of 9.2% and reach $27.2 billion by 2009, according to IDC. The reason for this growth? "This critical combination of both low-cost operational capabilities and high-value services offerings are crucial elements for vendors to help their customers create truly dynamic IT organizations."

Global 2000 companies typically support a number of production application systems, spanning a range of technologies and geographies. By outsourcing application management to IT service providers with offshore operations, they can reduce costs by leveraging the more economical offshore model of application management technologies.

Business benefits from outsourcing extend beyond the higher profitability inherent in lower costs. Organizations are focused not only on saving time and money, but on things that they can gain. This includes skills, process and quality improvements, and competitive advantage.

Outsourcing can lead to a greater ability to focus on core competencies, accelerated time-to-market, maximized investments in existing technologies and skills, and maintaining the 24 x 7 systems availability that customers expect.

REDUCE TCO AND INCREASE BUSINESS VALUE

Historically, the following basic guidelines have served enterprises well in their efforts to achieve an initial wave of cost reduction and system stability:

- Select only those applications suitable for developing or maintaining at a remote site.
- Determine clear partner objectives and success measures.
- Insist on an on-site project manager from the partner to ensure the project is managed according to the customer’s and accepted U.S. business standards.
- Choose a partner that has a flexible and collaborative culture, and ensure that the delivery team understands and can adapt to your organization’s ways of doing business.
- Look for a partner with solid transition and knowledge management methodologies.
- Track your partner’s change management ability.
- Ensure that your outsourcing partner has metrics gathering and reporting processes in place that will detect performance problems before they become persistent.

Despite the initial wave of successful engagements, the pressure continues to reduce costs and improve service levels remains high, so it is necessary to take the model further. Here Syntel, a U.S.-based IT service provider with an extensive Global Delivery Service, suggests specific best practices for reducing costs and improving business performance gleaned from hundreds of application management engagements among the Global 2000.

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When considering the economics of offshore production support—the job of maintaining and managing a company’s key business applications—the key benchmark is total cost of ownership (TCO).

TCO consists of two main elements: the primary expense is basic support, which covers the cost of the on-site/offshore personnel that will support your applications. The remainder is system costs that cover the costs of running the mainframe computers and other infrastructure to support existing systems, during both production and software development.

In this paper we will recommend ways to minimize both basic support and system costs via the following Syntel best practices:

• Manage support activities by business value
• Consolidate support portfolios
• Measure “business services management”
• Minimize support processing costs
• Implement rigorous security measures

3. BEST PRACTICE: MANAGE SUPPORT ACTIVITIES BY BUSINESS VALUE

To minimize the personnel costs of application management, it is essential to understand the value of the various support activities to the business. At many companies, however, “application maintenance” denotes a broad, undifferentiated range of services, from responding to ad hoc user requests to fixing serious problems (permanent, or root-cause, fixes). To initiate better controls, Syntel recommends segmenting support into two categories, core support activities and minor enhancements.

Core support activities are the minimum required to keep systems—and business—up and running. Though companies have different names for this, such as MLRB, or the Minimum Level Required for Business, in essence core activities are essential for day-to-day operations.

Minor enhancements, on the other hand, entail activities associated with minor changes to functioning systems, such as assisting users with business inquiries or making minor modifications to comply with industry regulations (see Table 1).

Though most tasks performed by an offshore support team are core activities, minor enhancements can reduce efficiency and increase costs. Historical data collected by Syntel suggests they amount to 10 to 20 percent of the support team’s workload, representing a hidden cost in production support. Controlling such costs without impacting service levels is the goal of this “best practice”.

Syntel strongly recommends a review of support activities to categorize them into core and non-core. This sets the stage for a clear support strategy, specifying which activities are business critical and understanding their exact costs. Minor enhancements, as defined in the strategy, should be segmented and budgeted separately. With the support team thus focused on core activities, costs can be lowered without reducing business-critical service levels. And once segmented, non-core activities can be monitored and managed more effectively.

4. BEST PRACTICE: CONSOLIDATE SUPPORT PORTFOLIOS

Consolidated application portfolios provide synergies that can lower TCO. But most IT organizations in

<table>
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<td>Core</td>
<td>Monitoring batch cycles to pre-empt problems</td>
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<tr>
<td>Core</td>
<td>Updating documentation to reflect program changes</td>
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<tr>
<td>Minor</td>
<td>Assisting business users with system inquiries</td>
</tr>
<tr>
<td>Minor</td>
<td>Creating a test environment</td>
</tr>
<tr>
<td>Minor</td>
<td>Analyzing impact of changes to interfacing systems</td>
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the Global 2000 are vertically, or functionally, aligned: business domains such as finance or marketing rely on a group of closely related applications and IT support staff, usually managed by a vice president of that business function. Each group may have a separate contract to maintain and manage its application portfolio. While benefits do accrue from specialized support staff, this diminishes the possibility of lowering TCO through economies of scale.

In contrast, support costs can be lowered if application portfolios are consolidated across business domains into larger groups with a single team to support the consolidated portfolio. Consolidating separate support teams optimizes management overhead. Since the same team will now be supporting more than one function, team members can be cross-trained. Thus a larger, more flexible team will be qualified to support each element of the portfolio, leading to further economies while protecting against employee attrition.

As an example, if 10 engineers were supporting marketing applications and 10 supporting finance, after consolidation the team could be optimized at 16. All would be cross-trained on both systems and available to meet any contingency.

Also, through consolidation, some of the administrative and management overhead of smaller support teams can be shared, which can lead to cost reductions.

What criteria should CIOs use as a basis for consolidation? Syntel suggests the following four:

- **Common technology.** Consolidation of support makes sense when different application portfolios share the same technology. For example, all Internet-technology portfolios could be consolidated, or applications sharing platforms such as mainframe. Applications based on common operating systems and databases could be consolidated, as well as business functions running the same application software, such as SAP-based human resources and manufacturing.

- **Linkages and dependencies.** The more linkages and dependencies, both upstream and downstream, among vertical application portfolios, the more opportunities exist for consolidation. End-to-end ownership would eliminate contention among different support teams when systems are linked through data or system dependencies.

- **Common business processes.** Commonality in business processes can have important implications for consolidation. Domestic and international business processes, for instance, may share 80 percent of business logic and code, making them ideal for offshore production support. And when systems share the same user groups, the support team becomes more competent to address user problems.

- **Identical service levels.** Strong candidates for consolidation generally require common service levels, such as 24 x 7 uptime.

Detailed support metrics are essential to maximizing the benefits of outsourced application management. In fact, the quality of metrics is proportional to a service provider’s competency in production support. Yet when evaluating service providers, most companies consider only Software Capability Maturity Model (CMM) assessment.

Even CMM Level 5, the highest certification, concerns measurement of software processes only, not overall effectiveness in production support. While a critical indication of a service provider’s strength, Syntel views CMM assessment as the entry point for vendor evaluation, not the final word. In the new paradigm, Global 2000 companies

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<td>Service Levels</td>
<td>Assisting business users with system inquiries</td>
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“...IT service providers with proven offshore facilities are uniquely positioned to deliver exceptional quality and lower costs.”
should evaluate an IT service provider’s ability to measure business services management (BSM)—support metrics aligned with business goals. This provides a better, real-world assurance of the IT service provider’s processes and expertise.

According to CIO Magazine, most IT departments are more familiar with service level metrics that measure improvements in technical capacity or reductions in IT costs, rather than enhancements in business capability. Production support service providers that can demonstrate true BSM metrics on a daily, weekly and monthly basis will likely deliver the most value to your business.

As an example, system uptime of 99.5% is a widely used support metric. Yet what if that 0.5% downtime occurred during the most business-critical periods? More useful might be a BSM metric that measured uptime during the busiest hours of the day. Another common metric concerns meeting due dates for project deliverables, such as a new software release. This is meaningless to the business if the delivery date was extended several times during the course of a project. A metric that detailed the number of times and duration of project delays would better serve the business’s need for certainty.

A capable offshore provider will be able to track BSM and show improvements over time, both in service levels and overall costs. It will also work with business units to create new metrics that reflect evolving needs. Such collaboration is the essence of cost-effective business services management.

### 6. BEST PRACTICE: MINIMIZE SUPPORT PROCESSING COSTS

To minimize total cost of ownership, offshore service providers should carefully manage “support processing costs,” systems expense generated in the course of application maintenance and management.

While most IT departments focus on the labor savings inherent in offshore support, they may underestimate or ignore the fact that production support can cause system costs to increase. Data processing and program test and development performed in the course of support can result in significant expense from heavy utilization of CPU cycles and storage.

In vendor evaluation, it is important to discover the service provider’s awareness of its potential to increase processing costs. Existing providers should be asked to demonstrate the competencies and work processes they put in place to minimize systems costs.

The most competent service providers are proactive about minimizing processing costs from the start, developing tools for identifying and analyzing “high consumption” support tasks. Guidelines should be issued for how and when such tasks should be performed, and fixes developed that are based on savings priority. In addition, best practices around CPU usage and disk management should be implemented, as these represent the lion’s share of support processing costs.

### 7. BEST PRACTICE: IMPLEMENT RIGOROUS SECURITY MEASURES

It is a fact that offshore outsourcing adds an element of geopolitical risk to production support. Sensitive data, intellectual property and the support infrastructure are at risk from a range of increasingly sophisticated internal threats and external attacks, as well as from system failures and natural disasters. Therefore, it is essential that you work with the offshore provider to implement sound, proven security measures. Not doing so could have a catastrophic effect on total cost of ownership and the business itself.

### Table 3: Service Metrics—Old Paradigm versus Business Services Management

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<tr>
<td>OLD</td>
<td>BSM</td>
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<tr>
<td>x</td>
<td>99.5% uptime</td>
</tr>
<tr>
<td>x</td>
<td>99.0% uptime during critical business hours</td>
</tr>
<tr>
<td>x</td>
<td>Met scheduled date for software release</td>
</tr>
<tr>
<td>x</td>
<td>Release date was extended 3 times</td>
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Secure production support includes measures such as network firewalls and other perimeter protection, as well as encrypted communications to and from the offshore facility. Beyond such baseline measures, Syntel has developed several best practices for protecting the production environment:

• **Appoint an information gatekeeper.** In the course of doing their jobs, offshore support staff require access to live production data that could be misused, such as social security numbers or credit card accounts. A gatekeeper on your staff should monitor access to all sensitive information, dispensing subsets as needed to authorized support staff.

• **Monitor user identifications.** Sloppy administration of user IDs can compromise security. All user IDs should be periodically checked and accounted for, and inactive IDs immediately disabled.

• **Segregate production, test and development environments.** Common sense dictates that you should control the production environment, while production support controls the development and test environments. Segregating these environments keeps their integrity intact, protecting the production environment from security breaches as well as untested or malicious code. Access should be allocated to support staff based on their job requirements, while configuration management processes manage the movement of code into repositories and forward into production.

• **Insist on background checks.** Some customers believe that because of cultural differences and the sheer distance, background checks for offshore support staff have no value. At Syntel we take background checks very seriously. We recommend that every individual involved in offshore support be carefully screened to ensure they have the right credentials and profile.

• **Secure physical assets.** Computing assets such as servers and disk drives containing sensitive data and code should be physically secured in the offshore location. At Syntel each customer is assigned a separate, secure access area housing all sensitive infrastructure, data and code.

• **Update plans for disaster recovery and business continuity.** The offshore provider should implement extensive disaster recovery and business continuity plans for the support function, regularly audited and verified to ensure their validity. The emphasis should be on recovery: in the event of a natural disaster or system failure, it is critical that the recovery plan be seamlessly executed between the offshore facility and the U.S.-based customer location.

When such practices are rigorously enforced, even the most prudent customers can be confident that sensitive production data and processes are secure.

### CONCLUSION

IT departments facing smaller budgets that have accompanied the recent economic downturn will need to find new ways of thinking to do more with less. Fortunately, IT service providers with proven offshore facilities are uniquely positioned to deliver exceptional quality and lower costs. In this paper we have explored just a few of the best practices developed by Syntel using its successful Global Delivery Model for application management.

Global 2000 companies will continue to embrace this Global Delivery approach because it responds to their demands for availability, scalability, and reliability. With access to global knowledge workers, value-added solutions, and aggressive TCO management, Global Delivery of application management represents a compelling opportunity for lowering IT costs while adding value to the business.

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1. IDC Press Release, May 19, 2005

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### Table 4: Best Practices for Secure Production Support

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about SYNTEL:

Syntel provides custom outsourcing solutions to Global 2000 corporations. Founded in 1980, Syntel’s portfolio of services includes BPO, complex application development, management, product engineering, and enterprise application integration services, as well as e-Business development and integration, wireless solutions, data warehousing, CRM, and ERP.

We maximize outsourcing investments through an onsite/offshore Global Delivery Service, increasing the efficiency of how complex projects are delivered. Syntel’s global approach also makes a significant and positive impact on speed-to-market, budgets, and quality. We deploy a custom delivery model that is a seamless extension of your organization to fit your business goals and a proprietary knowledge transfer methodology to guarantee knowledge continuity.