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Keeping IT Relevant in a Hyper-Changing Environment



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EXECUTIVE SUMMARY

The next few years promise to be challenging for global companies across all industries. Significant fluctuations in oil and commodity prices, along with the recent credit crisis, are reshaping already hypercompetitive environments. Take the automotive industry: Although fuel prices have come down recently, their spikes over the last several years have changed consumer attitudes. Bigger is no longer better; automotive manufacturers find themselves with long waiting lists for small, fuel-efficient vehicles, while the stockpiles of large trucks and SUVs continue to grow. And as sales in the U.S. have collapsed, growth in emerging markets has led auto executives to target new consumers in new places.

For information technology, these forces have created enormous challenges. Despite increasing business demands, IT organizations are trying to remain “relevant” even as their budgets are being slashed. Moreover, IT is in the midst of a paradigm shift. No longer are IT staffs primarily housed at and globally managed from company headquarters in Western countries. As business expands internationally, IT organizations in emerging markets are gaining importance and power, forcing corporate IT departments to develop fresh operating models and deploy resources to centers of activity and demand in other countries.

To gain a deeper understanding of the obstacles IT departments face and to uncover some of the innovative methods that CIOs are developing to overcome these obstacles, Booz & Company conducted a survey of global worldwide Tier One automotive suppliers with annual revenue ranging from US\$500 million to more than \$50 billion.

THE PRIMARY CHALLENGES FOR IT DEPARTMENTS

Regardless of geography or market position, consistent issues emerged in the following four key areas.

1) Navigating Globalization

A. What is the appropriate balance of standardization and customization to enable local speed to market?

B. How can we find, grow, and manage local IT management talent in emerging markets?

2) Capturing the Value from Outsourcing

A. How much and what functions should be outsourced?

B. What is the best way to leverage outsourcers?

C. How do we manage the transition to outsourcing to ensure consistent service delivery?

3) Delivering Value from Enterprise Programs

A. How do we achieve value from an ERP implementation?

B. How can we reduce the complexity of our legacy application portfolio to move toward a leaner, more agile platform?

4) Driving Value from IT

A. What core set of IT capabilities are needed to deliver on IT's efficiency imperative?

B. How does IT maintain an "entrepreneurial spirit" when it is only tasked with being a business enabler?

C. How can IT effectively communicate the efficiency and entrepreneurial success to the business?

CHALLENGE 1: NAVIGATING GLOBALIZATION

As the focus of the market shifts from traditional Western markets toward emerging economies, automotive parts manufacturers have adjusted by moving their manufacturing footprint toward the emerging market and low-cost manufacturing countries. To rapidly enter these markets and meet the associated local regulations and political considerations, manufacturers have entered into numerous joint ventures (JV) and partnerships. This rush for market share has only complicated matters, since each partnership is largely unique to a particular country or region. From an IT perspective, these unique partnerships make it difficult to find a coherent means to deliver services across a wide variety of situations.

The survey results indicate that to deliver services successfully, two key issues must be addressed:

A. What is the appropriate balance of standardization and customization to enable local speed to market?

B. How can we find, grow, and manage local IT management talent in emerging markets?

A. The Appropriate Balance of Standardization

With the rapid establishment of new sites in emerging markets and low-cost countries, IT organizations are finding it increasingly difficult to provide standard services to new sites, especially when they involve partners in a joint venture. Providing a full and secure suite of standard IT services that matches the overall corporate architecture is difficult. The new sites are typically measured on their

own profitability and are rewarded if they reduce costs across the board; therefore, they tend to bristle at “expensive” standard IT services and demand alternative solutions at lower costs. Additionally, the lengthy implementation time of standard solutions can result in lost business opportunities in the new location. However, rejecting the standard approach comes with significant drawbacks, including insecure systems and data and an increased cost of complexity in both process and systems. Sometimes the severity of the potential impact may be known (i.e., in a conscious trade-off), but far more often this is not the case.

In our survey, we found that CIOs have tried or evaluated a variety of approaches—some standard, others not—to meet the demands of the local business. These solutions include a “bare-minimum” and barely standard infrastructure to increase speed of implementation; ad hoc IT solutions outside of core infrastructure; and simpler, low-cost “ERP-lite” solutions. These approaches vary widely with respect to standardization, but they appear to be acceptable and even successful options for the survey participants who have implemented them—striking an appropriate balance between standardization and cost. These approaches do not present an ideal solution predicated on robust standards, but they do allow the IT organization to understand, monitor, and control remote site implementations. Which, in itself, is an achievement: More than a few companies are unaware of all the components of their IT environment in their emerging market locations.

Booz & Company Perspective on Standardization

For sites in countries concerned about the high cost of standard IT services, organizations should mandate the following:

- Be sure funding for IT services is not tied to the site's profitability. This will help avoid the conscious underfunding of IT, or disparities in the level of funding available over time.
- A centrally planned, standard global enterprise architecture configured with built-in flexibility for regional requirements and cost considerations (e.g., installing "SAP-lite" and lower-cost networks or moving toward a service-oriented architecture) should be established.

In some joint venture or partnership situations, such as the following, it may be beneficial to not integrate IT:

- For partnerships that do not require direct access/integration to the existing IT environment, provide a daily data feed through an interface.
- For joint ventures that do require direct access/integration to the existing IT environment, develop well-established policies on data management and security, and include the JV IT organization as part of the global governance forum.

Enforcing global standards but allowing local control is helpful in successfully setting up new sites (especially in emerging markets). Best practices include the following:

- Establish a centrally planned, standard global enterprise architecture configured for built-in flexibility for regional-level requirements.
- Establish a global governance panel that allows for major regional proposals or changes.
- Ensure IT infrastructure investments (e.g., hardware refreshes, networks) are properly considered within overall IT governance forums.
- Do not skimp: make the appropriate investment in data security. This is critical, especially in high-value-added processes such as research and development (R&D) and product development, as well as in joint venture partnerships.

B. Talent Management in Emerging Markets

Because of challenges in the labor market—particularly hiring and developing employees in emerging markets—corporate officers are increasingly paying attention to talent management issues. In fact, nearly two-thirds of companies in our survey cited talent management as a strategic corporate focus. Specifically, these companies are struggling to find IT workers in emerging markets who can be developed into mature IT managers. The reasons include:

- Competition for talent is fierce between firms, and employees often leave for better pay elsewhere with little to no notice.
- The IT organization in emerging market sites is often small or undersized. Everyone participates in a wide variety of activities; an organization structure focused on division of labor, with defined management responsibilities, essentially does not exist. Moreover, "fighting fires" is common and steals focus from management discipline and maturity growth.
- IT employees are psychologically more aligned and accountable to the joint venture or specific emerging-market site than to the broader IT organization.

- The talent at the emerging market sites sometimes has less “business awareness and experience” than the average IT worker (i.e., the business decisions they make do not consider all the appropriate factors, such as security risks).
- There is no defined career path for talent at the emerging market sites—in fact, no company participating in the survey had a robust career progression plan for IT employees in emerging markets.

Exacerbating the problem is the fact that as companies are having trouble developing local talent they are also finding it difficult to recruit at the executive level.

As a result of all this, most survey responders defaulted to an “ex-pat model”—deploying IT managers from IT centers in established countries to new sites, at relatively high ex-pat costs. However, as more work shifts to emerging locations, this is not a long-term solution. The ex-pat model moves senior IT staff physically away from corporate leadership, leading to disconnects with the business regarding requirements, priorities, and the proper enterprisewide funding of IT. It also hinders regional corporate operations from developing the skills needed to grow and retain local talent.

Booz & Company Perspective on Global Talent Management

Make your local IT talent truly part of your global management staff.

- Build a networked, “virtual organization” that does not centrally locate the majority of IT at the company headquarters.
 - Invest in IT talent for the long-term with training and functional rotations.
 - Make it known to local talent that they are part of a global team, with global responsibilities—and once skilled, they can be deployed anywhere.
- Move from an ex-pat manager deployment model as soon as possible.
- Local cultural conditioning is just as important as the central IT knowledge and processes.
 - Get on the learning curve now—the local labor market dynamics in areas with very large populations and high growth are not likely to change anytime soon.

Minimize turnover by emphasizing the strategic nature of local IT work and providing local talent with strategic initiatives to participate in or to lead.

Build up remote service capabilities to minimize the need for local labor.

Nearly two-thirds of the companies in our survey cited talent management as a strategic corporate focus.

Retaining Talent in China and India

Everyone is familiar with the potential of China and India for growing profits while leveraging a low-cost workforce. For most companies, however, the double-digit annual wage inflation associated with this growth has complicated talent management and retention. To address these issues, some companies are adopting increasingly Western-style human resources management policies, with some local modifications.

More and more employers are taking a highly tailored approach to partnerships with universities and higher education institutions to increase the candidate pool. Although many companies target the top universities, candidates from second- or third-tier schools are also proving successful, capable, and more loyal. However, this candidate pool is often not as polished as those from the top universities and may require more training regarding social skills.

A strong brand name helps attract new employees, but, to retain employees, a true career progression model into and above middle management is necessary. Training and development has proven one to be of the top levers for retention. Investing locally in leadership development centers not only builds employees' global business understanding but also sends a strong message that the company is committed to local workers. Best-in-class companies tailor their middle management development program to the local market, while also establishing fast-track promotion criteria to build a continuous talent pipeline.

CHALLENGE 2: CAPTURING THE VALUE FROM OUTSOURCING

IT outsourcing is nothing new to auto parts manufacturers driven by annual cost savings objectives. Regardless of whether they have a centralized or decentralized operating model or a standard or best-of-breed application model, auto parts manufacturers have embraced outsourcing because it makes economic sense. In fact, there seems to be no correlation between the degree of organizational centralization and the propensity to outsource.

However, there is a correlation between the region a company operates in and the degree of outsourcing undertaken. Most North American participants have shown a zeal for outsourcing and an associated level of outsourcing maturity. In other regions, the attitude toward outsourcing is not quite as bullish (see Exhibit 1).

The automotive industry as a whole is much more mature than most other industries when it comes to outsourcing and offshoring. Despite this, survey participants said they continue to struggle with how to successfully outsource; they want to understand the optimal outsourcing mix and to develop the required capabilities to manage the transition. Based on our survey results, the CIOs are focusing on three major questions related to outsourcing:

A. How much and what functions should be outsourced?

B. What is the best way to leverage outsourcers?

C. How do we manage the transition to outsourcing to ensure consistent service delivery?

Exhibit 1
Regional Outsourcing Trends



Source: Booz & Company

The Data Center Outsource/In-Source Dilemma

In recent years data center management has come to be viewed as a commodity and has become one of the largest candidates for outsourcing. However, questions have been raised as to which IT services should be outsourced or in-sourced. To answer this, two major trends must be considered: power constraints and hardware virtualization.

Many corporate-owned data centers will require significant power upgrades in order to support business growth. Booz & Company saw that clearly at a major healthcare company, which had two primary data centers at power consumption capacity. Their facilities had been built 10 to 15 years ago when power usage was low compared to today's standards (whereas today's servers equal the performance of multiple "older" machines, their power needs have increased 200 percent to 400 percent). To continue to run their existing data centers, the company needed to make a \$5 million investment to upgrade its facilities' power capacity. Because of this, the company is exploring a more economical and scalable option—outsourcing facilities management to a third party, while retaining day-to-day management. In other words, this company—like many other businesses—wants to let someone else worry about space and power constraints, while still using its own IT staff to run the operations.

At the same time, hardware virtualization, specifically server virtualization, has significantly reduced the amount of equipment requiring management. Server virtualization essentially splits each server into a series of virtual machines, minimizing the number of physical servers needed. However, most outsourcing vendors have no incentive to virtualize; contract size is dictated by metrics—such as, the number of CPUs managed—that encourage more, rather than less, equipment. Hence, companies are re-evaluating whether it makes sense to in-source server management and virtualize on their own before outsourcing data center operations.

A. Outsourced Functions

As expected, the more standard a function is across companies or industries, the more likely that an outsourcer can provide a significant cost and/or service advantage.

However, survey participants said that as they review results of their outsourced operations, they are beginning to rethink their outsourcing decisions. In some cases, they are bringing services back in-house.

Typical candidates are those functions for which the vendors have no financial incentive to improve (e.g., server hosting) or for which the company can leverage commodity resources to provide the service at a comparable cost (e.g., deskside support). Other reasons for in-sourcing include the inability of the outsourcing vendors to adequately support far-flung sites (especially at factories), the loss of core domain knowledge, and vendors missing service-level agreement (SLA) targets without financial or contractual consequences. Survey participants have found that vendors' initial costs may be lower, but then change order costs for "standard" required work outside of the original baseline need to be factored in. Therefore, in-sourcing can provide the services at a competitive cost.

That said, outsourcing is still preferred over in-sourcing. In fact, nearly 20 percent of our survey participants said they have outsourced almost their entire IT environment and have no plans to deviate from that strategy. An additional 30 percent have outsourced a majority of their environment. Only 30 percent of participants in our survey said their firms handle the lion's share of IT in-house.

Booz & Company Perspective on What to Outsource

Outsourcers can typically provide commodity services at lower costs for a particular service level. Furthermore, when an organization is spending the majority of its time (inefficiently) delivering commodity services, management's attention gets directed to these services, diverting focus from more strategic and value-added activities. Thus, commodity services should be outsourced to the extent allowed by the culture and the organization's outsourcing maturity.

If in-sourcing is pursued, use it as an opportunity to develop a comprehensive baseline of all activity associated with maintaining the function. Once the organization has this detailed baseline, it will be in a better position to negotiate any future outsourcing deals (if it so chooses), and it will have more control over vendors.

Organizations should have a clear view of the capabilities they want to grow in-house and those that are commodities and should be outsourced. Booz & Company segments capabilities into three categories:

- Core—Capabilities that provide a strategic advantage and/or require company "DNA" (e.g., enterprise architecture, IT strategy). These capabilities should not be outsourced.
- Enabling—Capabilities that enable core capabilities and/or are strategically important but still outsourceable. These capabilities may or may not be outsourced depending on the company's culture, strategy, and outsourcing maturity.
- Sourceable—Capabilities that are commodities (i.e., they are not strategic and can be readily supplied by an outsourcer). These capabilities should be outsourced if the company is mature enough and there is adequate cultural support.

B. Leveraging Outsourcer Capabilities

Increasingly, companies are looking to outsourcing to fill their internal capability gaps, not simply to reduce costs. Our survey results show that the highest degree of outsourcing leads to a lower cost structure with generally greater capabilities. The most successful companies—from both a cost and capability standpoint—have moved beyond managing low-cost full-time equivalents (FTE) and have implemented a more mature managed-services model. A managed-service model contracts with a vendor to provide a service at a set price, regardless of the number of FTEs, software, or hardware required. The company then rigorously manages results and deliverables against a set of service-level agreements (SLA) and outcomes, not processes or FTEs.

The benefits of this approach are substantial. Services are more easily

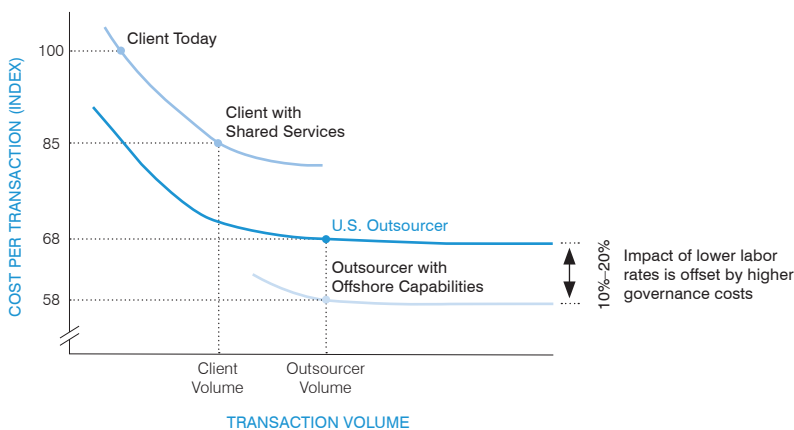
scalable and have a lower and more variable cost basis—a tremendous benefit in turbulent markets (see *Exhibit 2*). This leads to predictability and transparency into costs, which builds tremendous credibility with the business. Most important, company resources can be focused on evaluating and delivering results to the business, not on providing day-to-day direction to, and oversight of, the outsourcers.

Proper vendor due diligence is key to implementing an effective managed-services model. No vendor is competent across the spectrum of all IT services, especially on a global basis. A company must understand the relative strengths and weaknesses of its vendor pool and divide the outsourced services into bundles to take advantage of those specific capabilities. For vendors without global scale, it falls upon either the internal IT organization or a

partnership with another vendor to provide comprehensive coverage. Many outsourcers that lack global or specific service capabilities will subcontract with other outsourcers to acquire them. It is important to understand these relationships and their potential impact on service delivery. Issues discovered in due diligence should be incorporated into the contract, giving companies an out clause should delivery through these third parties affect meeting their SLAs.

Several participants are considering “offshoring to themselves” through developing captive offshore locations in Asia, but are concerned about both the management of the centers and the true cost savings, given the significant wage inflation in many potential locations (e.g., India). There is additional concern about the impact that a captive offshore center would have on existing vendor relationships. Only one company in our survey has pursued this strategy. This company indicated that a captive center gives it a larger and more flexible talent pool, with greater control over project execution and better knowledge retention than would be the case in a typical outsourcing relationship. However, with this approach, the company must worry more about competition for staff at all levels, and the company has less flexibility to scale up or down as with a traditional outsourcer. With respect to captive ventures, the survey results are consistent with what we have seen with many companies—most global companies explore the idea of captive centers but, upon deeper examination, recognize that the startup and operational aspects are too difficult to manage, and so they abandon the idea.

Exhibit 2
Cost Impact of Outsourcing



Source: Booz & Company

Booz & Company Perspective on Leveraging the Outsourcer

Leverage outsourcers for capabilities, not just to save costs.

No vendor is competent across the spectrum of all IT services; companies must understand which vendors are best suited to providing certain services to ensure operational capability.

Proper vendor due diligence prior to the start of the contract is a significant factor in future operational service success.

Develop contracts with provisions for switching vendors for similar services if they do not meet their service level agreements (SLA).

Although companies with captive offshore IT service centers maintain complete control of projects, we are not convinced that captive off-shoring is the best option in all situations, for several reasons:

- It is difficult to obtain and retain talent and build a culture for success (due to lack of management talent).
- Most companies headquartered in the United States or Europe are unable to respond quickly to market challenges (e.g., increases in local competition for talent).
- Most companies lack the operational knowledge and expertise required to run a captive offshore IT service center.

C. Managing Outsourcing Transition

The transition to an outsourced IT service organization poses problems for nearly all survey participants, in large part caused by the lack of a detailed activity baseline, along with immature or nonexistent vendor management capabilities. Often companies do not have a detailed baseline of the activities performed and the effort required to support those activities, which makes it difficult to accurately assess the required service levels. Moreover, when companies initially undertake an outsourcing program, they often do not fully understand what is and is not included in the vendors' pricing or exactly how the transactional relationship will work. Companies must have accurate information from the start. Otherwise, the work performed by the outsourcer may not be at the level of detail the client expects, or the vendor may perform a set of activities that differs from the client's expectations, leading to client dissatisfaction during transition. Our survey respondents reflected this concern, reporting that a lack of baseline information consistently caused them to underestimate the activity levels, requiring some companies to renegotiate portions of their IT contracts (at higher cost).

Vendor management is often overlooked as a key capability required to effectively manage transition to an outsourced model. Vendor management entails the skills required to effectively manage a full outsourcing relationship—reviewing services delivered, interfacing with senior vendor and internal management, and defining the interaction processes. The vendor management function not only serves as the central point of coordination for all contracting, bundling, and vendor setup activities, it must also track the ongoing vendor activity and develop risk mitigation plans.

None of our survey respondents felt their companies had mature vendor management capabilities, not even the organizations that were heavily outsourced. Those with limited outsourcing specifically indicated that one of the reasons they have not outsourced more is their poor vendor management. This was due in part to these companies' inability to manage SLAs across multiple dimensions and due in part to deficiency in their knowledge of the contracts. One participant said this lack of knowledge has led to an almost nonexistent enforcement of SLA violations.

Respondents gave several examples of how vendor management directly impacts contracting. One survey participant had outsourced a three-year SAP project, and when the initial contract expired, the company faced significant cost increases. A poor relationship with the vendor left the company in an unfavorable bargaining position, with no in-house knowledge. Unfortunately, the contract was re-signed, at less than favorable terms.

Booz & Company Perspective on Managing Outsourcing Transition

An effective transition to an outsourcer requires developing both a detailed activity baseline and a detailed asset baseline as well as robust vendor management capabilities.

- The activity baseline should include a set of activities defined by a standard service catalog for the whole organization; this, in turn, should include key information, such as cost drivers and total cost of ownership.
- Strong vendor management should be a core internal competency of any outsourced IT organization; the ability to manage vendor SLAs and accountability is critical.
- Internal vendor management process maturity (e.g., contracts negotiation, knowledge transfer, and services transition procedures) is critical for long-term success of the outsourcing agreement.

The knowledge transfer process must be managed diligently.

- Transitioning the knowledge from vendor to internal staff generally runs smoother than the other way around.
- The outsourcer typically has a process to transfer knowledge; do not rush that process. Companies tend to underestimate the time it takes to transfer knowledge effectively and pressure the outsourcer or release staff prematurely, increasing costs in the long-run.

Establishing a transition management group before the sourcing agreement goes into effect helps ensure a smooth transition.

- Do not count on vendors to communicate effectively with one another for transition of services; they may be natural competitors and guarded in what they share.
- Clearly define supplier responsibilities or accountabilities in areas where supplier activities overlap.
- Gain transparency into the suppliers' workflows where activities overlap to help remediate any issues.
- Establish a forum where issues can be discussed and resolved.
- Ensure suppliers' tools are integrated where necessary to support handoffs and areas of overlap.

Build in a process and key metrics to periodically educate the business regarding the value provided by outsourcing—outsourcing is more than just a cost-reduction lever.

Companies tend to underestimate the time it takes to transfer knowledge effectively.

CHALLENGE 3: DELIVERING VALUE FROM ENTERPRISE PROGRAMS

Success in delivering large programs throughout an organization continues to elude most of our survey participants. Despite having all the requisite disciplines and risk management components in place, widespread implementations often result in a great deal of frustration and expensive lessons learned. To increase the odds of adeptly delivering a large program, we have found that the following four discrete capabilities are needed.

1. Program sequencing and management: Use iterations and sequence the highest-value, highest-risk work first. Determine the program management by potential outcomes and investment control, rather than by status.
2. Requirements management: Keep critical requirements separate from exceptions, while creating criteria to know the difference, and drive to the relevant level of detail. In other words, don't allow for a protracted process where IT encourages the business to articulate the nuance of every need.
3. Technical design: Establish control of the technology architecture and don't get caught in the notion that all technology is a panacea; consider the available choices in addressing the legacy environment. Don't let the "tail wag the dog"—that is, architecture renewal cost should not account for a significant amount of cost, time, and risk to projects.
4. Procurement controls: Negotiate total potential scope, using contract mechanisms to match the risk and pace the program can manage (e.g., time and materials [T&M] are not to exceed four to six weeks for highly predictable iterations).

Survey respondents indicated they are most intensely focusing on two key issues:

A. How do we achieve value from an ERP implementation?

B. How can we reduce the complexity of our legacy application portfolio to move toward a leaner, more agile platform?

A. Enterprise Resource Planning (ERP) Value Capture

None of our survey participants have achieved the goal of common, global enterprise resource ERP, although they recognize the value inherent in such a system. Unfortunately, the majority of participants found that they fell woefully behind on both cost and schedule. One of the participants failed twice before successfully implementing an ERP program on the third attempt. Even when partially implemented, these systems have not delivered the value expected. The greatest problems typically arise from the significant customization challenges required for companies with numerous operations at sites in a variety of countries. Consequently, many businesses have chosen to shut down their ERP programs.

Complex global ERP implementation programs typically must take several dimensions into consideration, including an international spread with a multilingual, multicultural user community. A system landscape with multiple platforms, ongoing unaligned projects, and numerous interfaces make integration difficult. In addition, major organizational changes can impact system design and implementation (e.g., post-merger restructuring, reorganizations, and efficiency campaigns). Finally, regulatory requirements in diverse

operating regions can be difficult to tackle.

In our experience, over-customization and too much consensus-driven decision making are the real challenges to generating full value from ERP implementations. Attempting to customize a “global” ERP for regional/country-specific processes drives up the overall implementation and operational costs, destroying much of the program value. Buy-in from key business leaders and stakeholders is crucial for financial commitment and program support, but continued consensus decision making often leads to schedule delays and scope creep.

That said, the lack of a coordinated approach across the organization can also lead to value erosion. The erosion may come on the business side, either from a lack of integration and standardization of operating processes or from limited flexibility in operations. It may cause IT to overspend (and underutilize) existing resources (e.g., technology infrastructure) or to sub-optimize deployment of available resources. A strong centralized program office, with a significant change management component, is required to ensure an implementation that fully captures the value potential.

Even with all these challenges and complexities, our survey participants recognized the value that a common, global ERP system can bring, and that is still the overall goal. However, a large portion of those not pursuing a global solution cited high ERP costs as the reason for abandoning the program. In these cases, companies are globalizing companywide functions such as financial reporting but using localized systems when they can deliver efficient capabilities at lower costs, such as to support supply chain and manufacturing plants.

Booz & Company Perspective on Capturing the Expected Value from ERP Programs

Three operational models for global ERP are emerging:

- Common ERP, common templates (allowing some plants to have their own requirements and local customizations)
- Single ERP instance utilizing a 70 percent global standard template, 20 percent customized templates by region, and 10 percent local customization. Common reasons for customization:
 - Joint venture or customer IT environment interface demands
 - Market and product mix
 - Financial and other regulatory reporting requirements
- Multiple standard ERPs (e.g., QAD at plants, global SAP for finance, and/or regional ERP for back office)

Execution excellence and defining a pragmatic value capture agenda are the two improvement levers key to bringing home ERP investments.

- Execution excellence requires getting control of content and managing the delivery.
- Defining a pragmatic agenda requires articulating the expected program value and structuring the road map to capture the value.

Keep the critical requirements separated from the exceptions—and create criteria to know the difference.

Develop a process and governance structure to minimize customizations.

Use iterations and sequence the highest value, highest risk work first.

Focus the program management activities on outcomes and investment control rather than on status.

Establish control of the technology architecture.

Negotiate with vendors on total potential scope, but use contract mechanisms to match the risk and pace the program can manage (e.g., for iterations that are forecastable in nature, set a T&M limit, such as four to six weeks).

Resuscitating an Ailing Program

A large Japanese original equipment manufacturer's IT organization had a laundry list of expensive, poor performing programs with escalating systems costs. Basic business change requests mushroomed into costly, over-budget, late projects. One program—after a year of requirements work—reported that it needed another year to document processes, doubling the estimated costs from \$25 million to \$50 million. The integrators were so imbedded in the project that they held all the critical knowledge about the systems and business requirements, and the CIO felt her program managers did not have the data to challenge the escalating costs.

To create a healthy program, Booz & Company was asked to perform an execution intervention. We critically reviewed the program requirements and re-sequenced the program such that the highest value and riskiest elements of the system were tackled first. This included using a proof of concept test when the business could not articulate its requirements sufficiently to justify coding. To ensure system integrator performance, we put in place several controls that minimize cost and schedule variances. To re-establish the value agenda, we created a program structure in which everyone has responsibility for only the areas in which they can impact value capture. We also established the right governance dialogs to help the business understand their options and make choices.

The improvements helped IT get its eight major programs back on track as well as to drive a forum for next-generation demand management practices within the OEM. Furthermore, IT was able to establish an operating protocol that balances future priorities with current limitations (i.e., IT's own housecleaning). Going forward, the IT agenda will be informed by both business and technical needs.

B. Application Portfolio Complexity Reduction

Reducing the overall size and complexity of the application portfolio is an ongoing challenge for many companies. The complexity of their current environment (often with limited off-the-shelf products) makes it difficult to begin the rationalization process. Additionally, companies often lack a comprehensive application total cost of ownership (TCO) assessment, complicating decision making on decommissioning options. Many decommissioning approaches focus on reducing application cost, but without a TCO analysis many costs often remain intact, merely shifting to another application rather than being eliminated. Indeed, we found that for one company, a 33 percent reduction in applications generated only a 7 percent drop in total costs. Also, business activities driven primarily by potential IT savings (without sufficiently calculating business savings) often fall short of return-on-investment (ROI) or payback hurdle rates, as the assets of many legacy systems have already been fully depreciated and had minimal direct support costs. Finally, the investment required often does not fit within the existing budget caps, only exacerbating the problem.

Even if the IT challenges have been met and the business supports the rationalization, legacy costs are difficult to remove. The risk-averse nature of the business often requires the archiving of old applications in case the need to access old information arises. This often proves excessively expensive—effectively requiring IT to support the costs of two applications. Without a rigorous application decommissioning program, most companies struggle to achieve top-quartile cost performance.

Reducing the size and complexity of the portfolio is a critical goal of all but one of our North American and European survey participants. However, as with most other companies, the complexity of their current environments makes it difficult to begin this process. Survey participants are taking two paths to manage decommissioning. Most are proactively undertaking a continuous but gradual decommissioning process to incrementally reduce costs. One company is pursuing a targeted program with a dedicated team (at higher initial cost) to dramatically reduce costs quickly; it is still too early in the process to determine if the targeted program will be successful.

Booz & Company Perspective on Application Portfolio Complexity Reduction

Application complexity reduction programs require strong leadership and good TCO data for success.

Transparency into the application TCO and key application data (e.g., number of licenses, number of users, business processes supported) is a crucial first step—and a challenge in itself.

Manage the overall cost of applications when making decisions about decommissioning, rather than managing the number of applications:

- Application owners are often focused on reducing counts rather than concentrating on eliminating high-cost, nonstandard applications.
- A focus on application count incorrectly suggests that applications are “all created equal.”
- In reality, systems both among and within functions show a highly skewed Pareto distribution (e.g., we have seen examples where 90 percent of spend is consumed by 1 percent of the applications in a function).

Usually a lack of savings is reflective of an inability or unwillingness to “make hard choices” to eliminate resources.

Don’t lose sight of the savings associated with harmonizing business processes—these can “make the business case.”

Focus on applications rationalization before looking at service-oriented architecture (SOA)—but certain elements of SOA can be advantageous during complexity reduction efforts.

Key milestones for application decommissioning focus on verifying the elimination of all directly related application costs.

A clear and systematic process is required to capture archived data while meeting all legal/regulatory and business requirements.

CHALLENGE 4: DRIVING VALUE FROM IT

IT departments are under tremendous pressure to increase efficiencies while maintaining their role as a business enabler. Continual improvement in the cost-effectiveness of core IT services is the predominant demand on IT organizations from the business side; companies want IT to deliver more with the same budget, which in our survey averaged less than 1 percent of company revenue (see Exhibit 3). At the same time, CIOs are having difficulty communicating how they drive value beyond holding their budgets steady and implementing major programs. To enhance IT's value to the organization and then

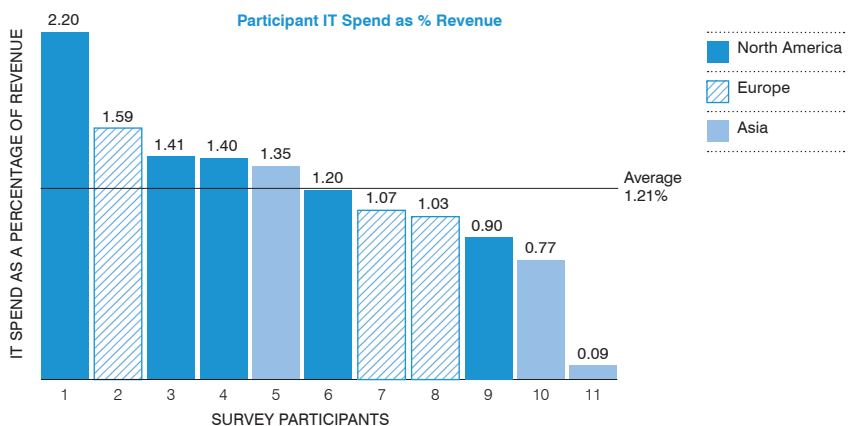
publicize the significant role that IT can play, survey participants are struggling with the following issues:

A. *What core set of IT capabilities are needed to deliver on IT's efficiency imperative?*

B. *How does IT maintain an "entrepreneurial spirit," when it is only tasked with being a business enabler?*

C. *How can IT effectively communicate the efficiency and entrepreneurial success to the business?*

Exhibit 3
Cost Control Remains a Key Focus Area Among CIOs, with IT Spend Remaining Fairly Consistent Across Tier 1 Suppliers



Note: Data as provided by participants (may be under- or over-reported due to accounting treatment).
Source: Booz & Company

A. IT's Core Capabilities

Across all organizations, there is a set of strategically important IT capabilities that should be performed internally. Booz & Company calls these “core capabilities.” They include: IT strategy, IT governance, demand management, portfolio management, vendor management, and enterprise architecture. Although each organization determines the level of its core capabilities, core capabilities remain largely consistent across companies. Commodity capabilities (e.g., deskside support or network management) can drive value, but we find that core capabilities are the greatest enhancers of business value and, if developed and delivered properly, result in a step-change in performance.

Specific core capabilities vary from company to company, depending on differing levels of outsourcing, organizational maturity, and business structure. For example, in North America, some survey participants

are heavily outsourced and have retained only a few core capabilities, whereas in Europe and Asia—where sourcing is less prevalent and IT organizations are often less formalized—core IT capabilities often include commodity services. After a company identifies its core capabilities, the goal is, of course, to perform each of them at well-above-average levels.

Interestingly, when we rated survey respondents by maturity for each core capability (from nonexistent to moderate to world-class), most companies were performing at a moderate level at best. In some cases, this analysis contradicts the companies' self-assessment of their capabilities, as many felt that they were quite a bit above average. This is typical. Companies usually believe they deliver all services (core and commodity) well. In truth, they cannot do it all, despite their best intentions. Indeed, often companies that are delivering commodity

services get so focused on supporting these low-value-add activities that their core capability performance lags. To give core capabilities proper investment and staffing, a company either expends a Herculean amount of organizational attention on those core capabilities, or it outsources commodity services so they do not distract from the development of core capabilities. Demand management is the perfect example. Frequently companies think their demand management processes function well in actively managing approval of new project funding requests. But once shown the potential impact of a few tweaks to the system—such as separating supply management from demand management, staffing demand management with senior people, and providing the demand management team with reports that can influence the overall business—they frequently undertake a major effort to bring the demand management organization up to world-class levels.

Many companies felt that their core capabilities were quite a bit above average.

Booz & Company Perspective on IT's Core Capabilities

IT Strategy and Transformation, demand management, vendor management, and architecture and standards are core IT capabilities that should always remain part of internal IT.

Building core capabilities to world-class levels requires a large amount of management attention that is best achieved by outsourcing commodity capabilities.

- We have found that when an IT organization delivers a full suite of capabilities, 80 percent of the attention is directed toward commodity capabilities because that is where the highest volume of activity occurs.
- Only by shedding the commodity capabilities and focusing on core capabilities can an IT organization dramatically improve its performance.

Many IT organizations believe they perform their core capabilities at well above average levels. Only when they are shown specific examples of world-class capabilities and their positive impact effectiveness do they accept their actual level of performance.

B. Releasing IT's Entrepreneurial Spirit

In North America and Europe, cost reduction is consistently the main IT concern of the business—there is little demand for innovative IT solutions, since IT is generally viewed as a basic enabler for fundamental business functions. Proving the value of IT to the business beyond these core functions continues to be a considerable challenge for IT organizations globally. Most CIOs want to make IT more innovative, but many businesses continue to focus solely on costs. Adding to the challenge is that fully charging back IT costs to the business forces decision making that puts a premium on cost containment, not innovation, because the business does not want to “pay” for services that might be useful in the future.

Some of our survey respondents have begun looking toward providing more end-customer-focused solutions to prove their value to the business. These Tier Ones are trying to implement IT solutions that drive out costs from the organization's business processes (e.g., innovative customer portals, customer data analytics, and partnerships with OEMs to forecast market demands). Others are working on training the IT staff to be more market-focused through customer engagement techniques and are trying to improve the performance of specific functions with technology innovations, such as developing a data integration architecture that can reduce cycle time for engineering activities and better model engineering processes for testing and diagnostics.

However, most of the organizations surveyed have not installed a proper IT controlling function that would help them prove the value of IT to the business. Information across business units and regions was

usually difficult to collect (because of limited automation) and difficult to compare (because of minimal standardization of measures). Most IT organizations did not have a full TCO for each application, including both direct and indirect labor, hardware, and software.

Additionally, most survey participants have no more than one full-time employee devoted to studying emerging technology and IT innovations. Although corporate IT innovation has recently produced some clear successes—server virtualization, for one—currently, there is little appetite for increasing resources devoted to these types of breakthroughs. Among automotive suppliers, low profit margins have produced a risk-averse culture with limited thirst for spending on “luxuries” such as innovation. As one participant put it, “The only demand for innovation we’re getting from our customers is for innovative ways to reduce IT costs.”

Despite all this, Booz & Company has recently noticed a definite acknowledgment by CIOs of the importance of innovation. As cost improvements become more and more difficult to generate, CIOs are realizing that the way to stay relevant in the future is to come up with new ways to improve business performance. Although they have not yet figured how to create an innovation machine that is sustainable, we suspect that in the coming years many companies will dedicate a greater portion of their resources to innovation.

Booz & Company Perspective on Improving IT’s Entrepreneurial Spirit

Innovation is the next frontier, as it represents the best avenue for IT to stay relevant and keep its “seat at the table.”

Although no one has figured out how to transform IT into an innovative engine that is recognized by the business, more and more CIOs will start working on this in the near future.

Before staffing an innovation function, IT organizations must build the internal mechanisms to allow IT to communicate its value-add to the business. This includes data collection, analysis, and reporting mechanisms.

IT’s Demand Managers will be the main conduit to the business and most responsible for: (1) identifying business areas in need of innovation, and (2) communicating the value of IT’s innovations to the business. This role must be staffed appropriately and armed with the appropriate training and reports.

If an IT Innovation function is formed and staffed, it should be justified with “hard benefits” from the innovations it spurs.

Collaborative innovation should draw from resources across the IT organization—not only the functional silo in which the idea was developed—to ensure a broader perspective and the potential for additional innovation.

A “Fail Fast” project evaluation criteria allows for a rapid assessment of whether to proceed with the project. The usual alternative—spending 4 to 6 months studying a project’s viability—leads to psychological inertia (the project ultimately gets approved merely because of its unalleviated presence in the long evaluation process).

Innovation Imperative

The CEO of a medical diagnostic company recently asked the newly appointed CIO to change the IT organization's mandate from efficiency and cost-cutting to driving business growth and innovation. The CIO realized that with numerous emerging technologies and services in the industry, he could easily make the mistake of producing technical advances without practical implementations. Thus, he hired Booz & Company to help him define the appropriate innovation focus.

We found that implementing a well-defined and collaborative idea-to-commercialization process is key to generating high-quality and useful innovative outcomes. Nascent ideas are put through a "fail fast" project evaluation approach, which quickly evaluates and approves worthy projects, eliminating the four- to six-month time frame usually associated with project assessment. Approved projects were able to draw resources from across the IT organization (not merely the function that created the project).

Using this approach, the company identified two high-potential innovation areas that dovetailed well with the business strategy: One would differentiate the service experience, and the other would develop an analytical platform to allow the business to launch new information-based products. The medical company is now budgeting 5 percent to 10 percent of annual IT expenditures toward these and other innovation projects.

C. Communicating IT's Value

There is no doubt that IT departments have continually improved the cost-effectiveness of core IT services while implementing critical technology throughout their organizations. This is the norm, not the exception. But although IT departments may stoically weather budget cuts, CIOs struggle to effectively promote IT's efficiency gains and support success stories to the overall business.

IT must focus on identifying and separating ongoing maintenance from discretionary project spending. In our survey as well as in our work with clients, we typically find that no rigid delineation exists between the two. This obscures the true cost of IT services to the business. Too often, discretionary projects are funded from the maintenance budget, outside the formal project approval process. As a result, the business side of the organization is not forced to consider whether or not to fund specific IT projects and how the funding of those projects may impact support for other IT priorities. Consequently, the business side continues to ask for more and better IT output, unaware of what the IT department is already doing and how much of the company's resources the department is demanding. Across multiple engagements we have found anywhere between 10 and 20 percent of the IT run budget may be for discretionary work.

We also recommend the use of standard service catalogs that list the services that IT provides; this structures financial baseline information and facilitates the buildup of data on the TCO of the various IT assets and activities. Standard service catalogs allow for consistent comparison of IT spending and performance across functions and geographies. We found that the use of standard

service catalogs among survey participants varied. Organizations with a greater degree of centralization generally had higher implementations of standard service catalogs.

A standard service catalog also allows the development of transparent chargeback mechanisms. Chargebacks offer the business direct visibility into what various services cost and help drive discussions about the trade-offs required to fund new projects. The lack of transparent chargeback mechanisms obscures the true cost of IT services and exacerbates the difficulty of cost containment. Only one survey participant had

implemented a successful and transparent chargeback mechanism with great success. All other companies had difficulty for one of two reasons: (1) They have an overly complex chargeback mechanism, or one not agreed to by the business, causing constant conflict over fees, or (2) the IT budget doesn't include certain items in the service catalog that the department must nevertheless provide, such as Blackberry and cell phone usage or engineering services.

After costs are understood and a standard service catalog and chargeback mechanisms have been developed, the IT organization should

create a standard set of reports with which to communicate the IT organization's performance to the business. The key to success here is to generate reports in language that the business understands; communicate only information that is pertinent to the business (leave out much of the detailed technical language). Not only can such reports help communicate the IT organization's ongoing effectiveness, they can also be a powerful tool in helping the business understand the true value contributed by IT and the constraints under which IT operates.

Standard service catalogs allow for consistent comparison of IT spending and performance across functions and geographies.

Booz & Company Perspective on Communicating IT's Value

The IT organization must understand its own cost structure to an appropriately granular level for transparency and reporting to business.

Divisions/functions should have visibility into cost and utilization drivers.

Discretionary spend should be clearly delineated from costs associated with the day-to-day running of IT.

Costs should be regularly benchmarked using multiple sources and managed to benchmark levels on a tower-by-tower basis.

Cost allocations to divisions/functions should be based on the consumption of IT services.

Providing a robust business case process that specifically shows how the benefits can be measured post-deployment will help guide the project funding discussion with the business.

Regular audits of projects post-deployment can help show the business the value they received for their investment.

CONCLUSION

IT is at a crossroads. The wave of hyper-competition has placed increasing pressure on the performance of the IT organization. A decade ago, the CIO was automatically granted a seat at the executive table because corporations were devoting huge amounts of money and know-how to resolving the threat of Y2K and implementing large ERP and CRM systems. Those days are long gone, and now IT must find new ways to remain relevant. In the future that may mean making IT an innovation engine. However, today it means solving the issues on the minds of most CIOs:

- How to globalize and outsource successfully
- How to improve the organization's performance with enterprisewide solutions
- How to drive IT value and communicate successes to the business.

As our survey participants found, difficult choices and trade-offs are required to solve each of these issues. How will your organization solve them?

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