Evaluating the Benefits of IT Outsourcing

An IDC White Paper

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Introduction

If you are a technology professional or business executive, you may be feeling overwhelmed by the complexity of your company's IT environment, and you may be thinking about outsourcing. The decision-making process around outsourcing will include the assessment of a broad range of factors. These include identifying whether investment in a particular technology is the best decision, given how quickly it can become obsolete; how scalable the IT infrastructure should be to support the demands placed on it; how effectively you can manage this environment to support corporate business objectives; and potential cost savings that can be realized through outsourcing.

Potential cost savings associated with an outsourcing engagement depend on the size of the company and the scope of services involved, among other factors. Generally, a company considering whether or not

IDC Opinion

As companies struggle to find and retain quality IT staff, provide a high level of internal customer support, and reduce overall operating costs, many are turning to an external service provider to develop and manage their computing infrastructure. Instead of investing internal resources, these companies are able to focus on their core business competencies while outsourcing their IT challenges to a trusted third-party service provider. The decision to outsource can bring multiple benefits to an organization, including:

- Improved level of support offered to end users
- Improved focus on core business
- Reduced operating costs
- Reduced time to respond to desktop incidents
- Improved system reliability

Whether you are an end user of outsourcing services or a vendor providing such services, ClearCube Technology can bring higher service levels and lower costs to your desktop management solution. Because ClearCube blades are housed in a central location, servicing the blades turns into a very cost-effective and time-saving exercise, leading to improved efficiency in desktop management.

to outsource should look at the explicit cost of outsourcing — the direct cash outlay — and compare this with the costs of keeping the function in-house to see what cost savings, if any, are generated. However, within the scope of a cost-benefit analysis, any costs incurred by the decision to outsource must be weighed against the potential gains of outsourcing, measured by metrics such as access to new technology and skilled workers, improved service levels, and improved time to market.

Ultimately, the decision to outsource the ongoing support and management of your company's IT infrastructure may rest on the realization that you do not have the resources — time, personnel, or financing — to do it all yourself.

Challenges of Managing the Computing Infrastructure

Some of the "pain points" that your company may be experiencing in managing its own computing infrastructure could be driving your need to outsource your systems to an external service provider. Typically, these pain points can include:

- Providing a scalable, secure, and highly available computing infrastructure that minimizes costs while ensuring service quality

- Controlling network and systems complexity and obsolescence while managing an increasingly expanding infrastructure

- Ensuring bandwidth capacity and traffic loads at predictable costs to support mission-critical application environments

- Competing in an environment where rapid time to market and expanded geographic reach are critical to success

- Enabling an agile, flexible work environment that supports a rapid response to changing market demands

- Managing a multitude of best-in-breed service providers and product vendors needed to support the highest degree of service delivery

- Experiencing difficulty hiring and retaining skilled IT staff

The combination of these pain points forces many companies to lose focus on their core competencies. Needing help, companies are turning to external service firms to assist in the development and management of their IT infrastructure — from the network to the desktop. IDC recently completed 940 interviews with IT decision makers as part of its *eWorld* survey. The study showed that 92% of organizations using infrastructure management services from an external vendor will either increase or maintain the value of their contracts over

the next 12 months. The study also found that the overall number of companies turning to external service firms to manage their computing infrastructure on an ongoing (24 x 7) basis will continue to rise.

In accord with the survey findings, IDC predicts that spending on IS outsourcing services worldwide will increase at a five-year compound annual growth rate (CAGR) of 12%, exceeding $100 billion by 2005. Although this growth rate can vary considerably across industries (see Figure 1), clearly many companies are turning to outsourcing as a solution to the challenges of running and managing complex IT systems.

Figure 1
Growth of Outsourcing by Industry

Source: IDC, 2001
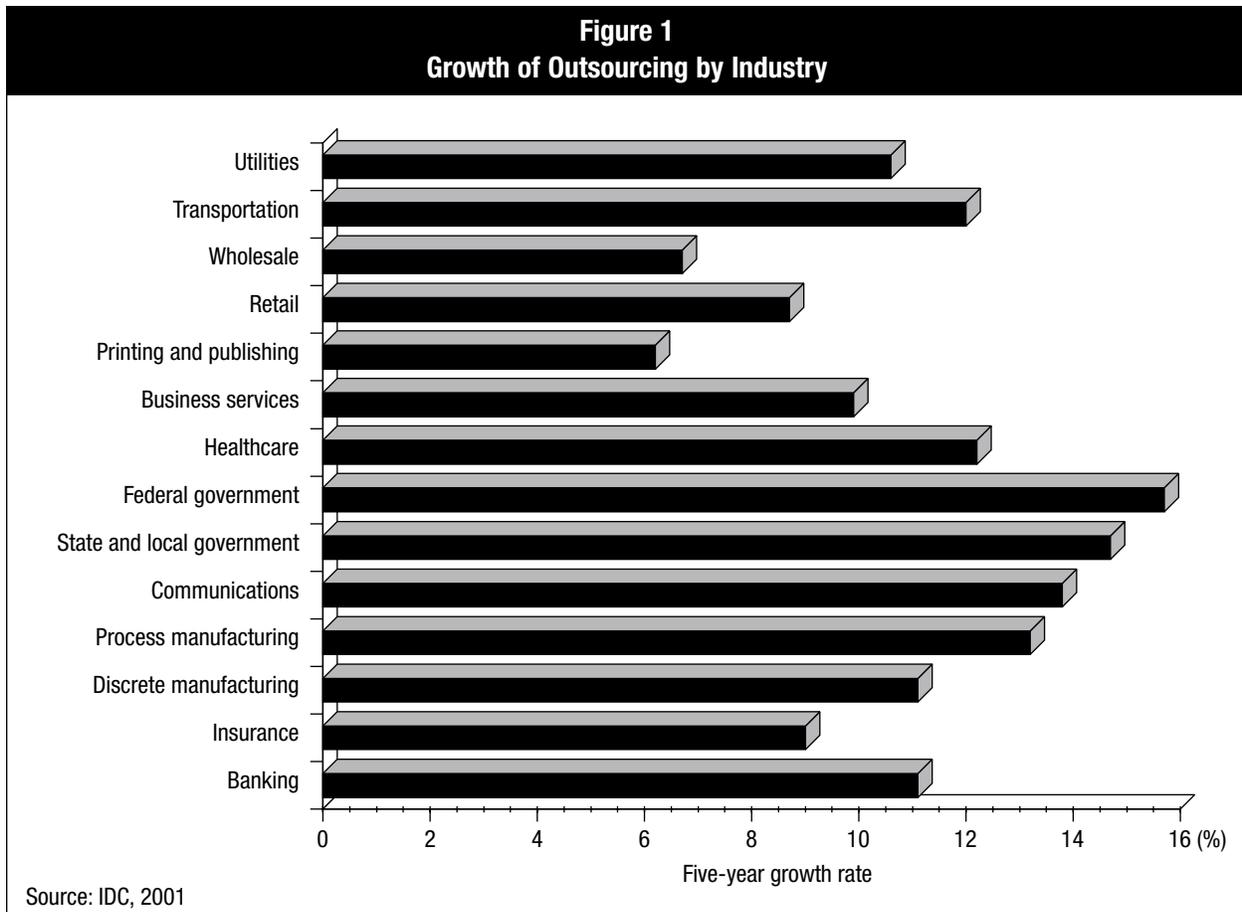
Benefits of Outsourcing

Tracking the potential cost savings associated with outsourcing will depend on a number of factors, including the size of the company and the scope of services involved. However, any type of outsourcing engagement has a number of realized benefits beyond potential cost savings, including the following:

• **Ability to focus on core competencies.** By handing over noncore activities to a trusted third party, a company can concentrate on activities central to its value proposition and increase its competitive positioning.

- **Faster and higher-quality service and improved efficiency.** Vendors' economies of scale, combined with service level guarantees, translate into increased operational efficiency for a company. For example, outsourcing vendors typically offer service level agreements (SLAs) for availability of at least 99.9%, and many include financial penalties for downtime. Along with higher-quality service, many outsourcers claim to reduce cost of management by up to 25%.

- **Access to new skills and technology.** Outsourcing gives a company access to resources not available internally, such as modern, up-to-date technology and skilled human capital.

- **Greater flexibility.** The flexibility gained through outsourcing helps a company react quickly to changing market conditions, fluctuating demand cycles, and increased competition.

- **Staff reallocation.** Personnel whose job responsibilities are reduced or eliminated by outsourcing can be reassigned to other, more strategic tasks.

- **Lower long-term capital investments.** In a typical IS outsourcing contract, the vendor takes ownership of and responsibility for managing all or part of the client's IS operations or infrastructure, thus eliminating the client's ongoing investments in computer equipment. The capital funds previously allocated for computer equipment are freed for spending elsewhere.

- **Improved predictability of costs.** Outsourcing provides a company with predictable yearly costs for the management of all or part of the IS infrastructure.

- **Assistance with organizational changes.** A third-party IT service firm can help build new infrastructures or merge two existing infrastructures during or shortly after a merger, acquisition, or joint venture.

- **Assistance with globalization.** A company looking to move into international markets can rely on a global outsourcer for assistance in broadening infrastructure and operational reach.

These benefits address many of the pain points noted above. By placing IT systems in the care of a trusted third-party service provider, a company is assured of a scalable, secure, up-to-date computing architecture at a predictable cost.

Desktop Management

Desktop management services can be provided internally through a company's in-house IT department, or the services can be provided externally as part of an outsourcing contract with a third-party IT services vendor. Table 1 summarizes the pros and cons associated with both internal and external desktop support.

Table 1 Internal Versus Outsourced Desktop Support: Pros and Cons		
	Pros	Cons
Internal desktop support	Onsite service capabilities	Unpredictable costs
	Clear accountability for service delivery	Heavy spending on support and end-user training
	Ease of problem communication	Huge time drain for IS managers
	Identifiable chain of command	Slow rate of response to desktop incidents
Outsourced desktop support	Allows for a focus on core competencies	Perceived loss of control and confidentiality
	Provides access to advanced technology and skilled human capital	Potential difficulty in managing outsourcing relationship
	Provides faster service and improved end-user support	Human resources issues (i.e., personnel transfers and layoffs as a result of decision to outsource)
	Allows for reallocation of staff to strategic initiatives	Loss of internal desktop support skills no longer used on a daily basis
	Higher predictability of costs	Difficulty of bringing support function back in-house should outsourcing fail to meet expectations

Source: IDC, 2001

Internal Desktop Support

The complexity of today's desktop computing environment has led to significant costs associated with maintaining and operating desktop hardware and software. IDC surveyed 400 business-unit managers and 200 IS managers in the United States as part of its *Desktop Cost-to-Use* survey and asked a series of questions regarding spending in the desktop environment, both in dollars and in time spent.

Taking a look at desktop services spending trends and opportunities, IDC found that organizations are spending most heavily across all environments and installation sizes on services such as help desk, software technical support, and end-user training. Meanwhile, organizations are spending most heavily with external service providers (i.e., outsourcing) in areas such as hardware maintenance, hardware and software upgrades, end-user training, and install/configure.

IDC's *Desktop Cost-to-Use* survey found that IS managers are spending roughly a third of their time on hardware maintenance/repair in medium-sized installations (typically 50–99 PCs per LAN segment). This spending appears to be draining resources from other services, particularly areas such as backup/archiving, security, and asset management. Business-unit managers may be picking up some of the slack for security and

backup/archiving services, but asset management appears to be falling through the cracks, with only 4% of business-unit managers' time and 2% of IS managers' time devoted to this activity. Clearly help is needed.

Based on the results of this report, IDC determined that help desk and software technical support are seen as critical services in which managers are less than satisfied with their internal efforts to deliver these services and that managers value rapid response — a feature that an internal IS department often may not be delivering.

Outsourced Desktop Management

Standard desktop management offerings provided by IT services vendors vary only slightly. Most vendors utilize a life-cycle approach that involves a planning/deploying/managing process and include the following services in their core desktop management offering:

- Asset management

- Inventory management

- Acquisition management

- Break/fix and field support

- Help desk

- Basic disaster recovery

- Client/server management

Some vendors have added higher-margin and enterprisewide services such as application management to their core desktop management offering to provide their customers with a broader solution. Most vendors have help desk capabilities as the first line of desktop support but must dispatch a field technician to provide onsite support for any incidents not resolved by a call to the help desk. The resource and travel requirements of servicing the distributed environments of large enterprise customers leave little room to build in cost savings and service level efficiencies within vendors' desktop management solutions. In fact, by reducing travel time and resources of servicing distributed environments (multiple buildings and multiple sites), outsourcers can reduce time (and costs) by up to 65%.

One option for enterprises looking to outsource and for outsourcing vendors looking to offer more efficient desktop services is the ClearCube technology architecture: a managed desktop architecture that provides PC functionality to the desktop from a centralized, rack-mounted environment. By taking the PCs off the desktop and centralizing them in a back room with the servers, ClearCube can dramatically increase manageability, agility, and security while improving uptime — all without increasing IT staff.

Service Level Superiority: The ClearCube Way

The ClearCube architecture can be used directly by a customer to improve the performance and efficiency of the desktop environment, or the technology may be incorporated within a larger outsourcing engagement by the outsourcing vendor. Either way, the customer will recognize improved service levels and lower costs in the desktop environment through the use of the ClearCube architecture, in which end users' CPU, memory, and disk storage are removed from their desktop in favor of CPU blades centrally located in a secure data center or equipment room. Only the keyboard, mouse, monitor, and peripherals are left at the end-user desktop, providing them with a traditional PC experience.

When incorporated into a larger outsourcing engagement, the ClearCube architecture will eliminate the need for the outsourcing vendor to dispatch onsite support to resolve desktop incidents, thus lowering training and travel costs and improving service efficiency for the vendor and customer. In addition, because the blades sit in a central location rather than on the desk of the end user, their aesthetic value is quite low, leading to lower packaging and shipping costs, which translate into lower costs for both vendor and customer.

Based on a recent survey of ClearCube customers, benefits of and improved service levels generated by the ClearCube technology include:

- Increased system uptime

- Improved security

- Ease of configuring and upgrading desktops

- Less time spent by IT staff making trips to the desktop for support

- Improved control of desktop environment

- Fewer members of the IT staff allocated to desktop support

In addition to reducing the time and personnel resources dedicated to desktop support, whether used directly by the customer or leveraged by an IT services vendor as part of a larger outsourcing engagement, the ClearCube technology reduces end users' lost productivity due to system downtime. If the system goes down, a member of the customer's IT staff simply swaps a spare preconfigured blade into the ClearCube rack to bring the system back up; remarkably, this is done without interrupting employees' work.

Customers also noted that the storage of ClearCube blades in a central location such as a secure data center or equipment room removes critical hardware from user desktops, reducing the potential for user damage or error and conserving critical office space.

Table 2 provides a summary of the pros and cons of traditional desktop outsourcing and outsourcing with the ClearCube technology.

Table 2
Traditional Desktop Outsourcing Versus Utilizing ClearCube Technology: Pros and Cons

	Pros	Cons
Traditional outsourced support	Allows for a focus on core competencies	Perceived loss of control and desktop confidentiality
	Provides access to advanced technology and skilled human capital	Potential difficulty in managing outsourcing relationship
	Provides faster service and improved end-user support	Human resources issues (i.e., personnel transfers and layoffs as a result of decision to outsource)
	Allows for reallocation of staff to strategic initiatives	Loss of desktop support skills no longer used on a daily basis
	Higher predictability of costs	Difficulty of bringing support function back in-house should outsourcing fail to meet expectations
Outsourced desktop support using ClearCube technology	Increased system uptime for desktops	ClearCube does not offer a management solution for mobile products
	Improved security	Secure version of the architecture does not support local applications; however, the ClearCube technology can be tailored to support local use with management approval (likely a positive feature from the management perspective and a potentially negative feature from the end-user perspective)
	Ease of configuring and upgrading desktops	
	Less time spent by IT staff making trips to the desktop for support	
	Improved control of desktop environment	
	Fewer members of IT staff allocated to desktop support	

Source: IDC, 2001

Financial Benefits of ClearCube

To demonstrate the business and financial benefits of the ClearCube architecture compared with the traditional approach to desktop PC management, IDC conducted in-depth interviews with 17 ClearCube customers. Overall, the 17 customers interviewed for this study realized significant operational improvements from leveraging ClearCube technology. These benefits included reductions in downtime; increases in productivity due to fewer trips to the desktop; faster time to configure new users; faster moves, adds, changes and upgrades; and an increase in the number of PCs per IT staff. All of these improvements contributed to significant operational savings for ClearCube's customers.

Based on the data from existing ClearCube customers and an average annual IT staff salary of $65,000, a company with 100 employees can expect to save more than $35,000 in annual operating expenses due to the efficiency and productivity gains associated with ClearCube. While this may not seem significant, it can amount to huge savings for a large or midmarket enterprise.

Measured against the average size organization of ClearCube's customers of approximately 5,720 employees and using a ratio of 100 PCs per IT support staff person, this translates into annual cost savings of more than $2 million (see Table 3 for calculations and assumptions). Using the same logic, a large Fortune 1000 company with a 10,000-seat ClearCube implementation can save more than $3.5 million annually in operating costs, resulting in a significant improvement to its bottom line.

Table 3 Operational Savings from ClearCube: Calculations and Assumptions	
	Data
Time saved per IT staff member (monthly) as a result of reductions in downtime; increases in productivity due to fewer trips to the desktop; faster time to configure new users; faster moves, adds, changes, and upgrades*	93.7 hours
Time saved per IT staff member (annualized, assuming 2,080 work hours/year)	1,124 hours or 28 weeks
Assume ratio of 100 PCs per IT staff member (i.e., one support staff person for a 100-PC firm)	1
Assume IT staff salary of $65,000 per year	$65,000 x (1,124/2,080)
Estimated annual cost savings for a 100-person firm	$35,120
Estimated annual cost savings for a 5,720-person firm (with 57 support staff)	$2,008,864 or 57 x $35,120

Notes:
 * These are hard-cost savings and exclude time for user training and user downtime.
Data is approximate and is based on averages of 17 ClearCube customers.
Source: IDC, 2001

Outsourcing Using ClearCube

While these cost savings estimates were based on the experiences of direct ClearCube customers, ClearCube architecture has implications for outsourcers as well. As noted earlier, when incorporated into a larger outsourcing engagement, the architecture eliminates the need for the outsourcing vendor to dispatch onsite support to resolve desktop incidents, thus lowering training and travel costs and improving service efficiency for the vendor and customer.

Summary: Advantages of Outsourcing with ClearCube Technology

As businesses struggle to find and retain quality IT staff, provide a high level of internal customer support, and reduce overall operating costs, many are turning to an external service provider to develop and manage their computing infrastructure. Instead of investing internal resources, these companies are able to focus on their core business competencies while outsourcing their IT challenges to a trusted third-

party service provider. The decision to outsource can bring multiple benefits to an organization, including the following:

- Improved level of support offered to end users

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Whether you are an end user of outsourcing services or a vendor providing such services, the ClearCube technology can bring higher service levels and lower costs to your desktop management solution. Because ClearCube blades are housed in a central location, servicing the blades turns into a very cost-effective and time-saving exercise.

IDC Opinion and Conclusion

Appeal of ClearCube to Traditional Outsourcing Vendors and Customers

As noted above, the ClearCube technology can be used directly by a customer to improve the performance and efficiency of the desktop environment, or the technology may be incorporated within a larger outsourcing engagement by the outsourcing vendor. In both cases, the customer will benefit from the cost savings and improved service levels generated by the ClearCube technology.

When incorporated into a larger outsourcing engagement, the ClearCube technology can eliminate the need for the outsourcing vendor to dispatch onsite support to resolve desktop incidents, thus lowering training and travel costs and improving service efficiency. The ClearCube technology can also make it profitable for desktop outsourcing vendors to target smaller businesses, potentially providing vendors with access to new markets.

Appeal of ClearCube to Desktop Utility Vendors

A critical part of the shift in providing computing services as a utility involves how desktop and desktop-like devices, such as personal digital assistants (PDAs) (e.g., Palm Pilot and BlackBerry) and laptops, will be serviced as core server and applications are migrated to a networked Internet data center infrastructure, leaving the desktop essentially isolated. The success of this emerging computing utility service infrastructure will be closely tied to the quality of service delivered at the desktop. Thus, the success in delivering computing utility services rests not only on how well core systems can be managed from a remote data center but also how well the desktop component of this computing utility model is serviced and supported.

Given the importance of successfully supporting and managing the desktop environment within the computing utility model, the

ClearCube technology may appeal to emerging desktop computing utility vendors such as CenterBeam, Everdream, and IT Utility. Common to these vendors is the provisioning of desktop services as a subscription or utility offering in which the end user pays for services on an as-needed basis and may own only the "telephone" portion of the delivery infrastructure — the desktop or laptop. The ClearCube technology could drive further cost efficiencies and higher service levels into the desktop management solutions of these emerging service providers.

ClearCube and the Small Service Provider

The ClearCube solution opens up the provisioning of desktop management services to a new set of smaller players that lacked the scale to compete in the traditional desktop management environment. The traditional onsite model of desktop management services is dominated by vendors such as IBM Global Services, CSC, EDS, Hewlett-Packard, and Unisys. By leveraging the ClearCube technology, smaller service firms may be able to profitably target the small to medium-sized company segment that up until now has fallen underneath the target market of the large, established vendors.

Challenges

In a workforce that is becoming increasingly mobile, remote access is critical. While ClearCube does not address a mobile work environment, it can be used to support and enable one.

In addition, the secure version of the architecture is not intended to support local application installation; however, the ClearCube technology can be tailored to support local application installation with management approval. This is clearly a benefit for IT departments and managers intending to limit end users' access to local drives and applications, and it may very well be attractive to the less-savvy end user who will be thankful for the reduced complexity. However, the savvy end user may resent having personal application access removed from his or her desktop.

Conclusion

The ClearCube technology can be a valuable component of a company's desktop management solution. As distributed end-user environments become increasingly difficult to manage and support amidst an increasingly complex IT infrastructure, more and more companies will turn to outsourcing and hand over their IT systems to a trusted third-party service provider in order to focus on issues core to the business. Whether used directly by a customer or leveraged by an IT services vendor as part of a larger outsourcing engagement, the ClearCube technology offers a solution to the growing problem of overburdened, understaffed corporate IT departments struggling to manage and support distributed end-user environments.

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