

THINKstrategies



*A Whitepaper by THINKstrategies  
On Behalf of CBE Technologies*

## **Solving the IT Challenges of Small and Mid-Size Organizations via “Utility Computing”**

## Executive Summary

Information technology (IT) has become a critical component of business success, whether you are a small, mid-size, or large-scale organization. The challenges associated with selecting, installing, maintaining, and managing information technology are particularly acute for small and mid-size organizations, both private businesses (Small and Mid-size Organizations) and government agencies, that can't afford the in-house staff necessary to plan, design, implement, and manage increasingly complex hardware, software, and networking equipment.

A recent Gartner Group survey found that 54% of large corporations with revenues in excess of \$900 million have entered into 'strategic sourcing' arrangements with IT suppliers, compared to only 28% of small and mid-size organizations. Large companies have recognized the value of relying on a smaller number of suppliers to reduce their IT costs and improve their IT operations. Small and mid-size organizations are just beginning to learn the same lessons.

This whitepaper examines a new 'strategic sourcing' approach to IT deployment and management that is gaining rapid acceptance among small and mid-size organizations. This new approach is called "utility computing," because it leverages many of the same business principles as the traditional utility companies.

Specifically, providers of utility computing services provide their clients a comprehensive set of IT planning, implementation, and management services for a simple, predictable fee. In addition to this predictable fee structure, utility computing emphasizes a continuous, proactive approach to meeting the IT needs of small and mid-size organizations, including government agencies. This approach maximizes the computing power and return on investment (ROI) generated by SMBs and government agencies from their IT investments.

*This whitepaper examines the advantages of utility computing over traditional outsourcing and VAR maintenance arrangements, and profiles how **CBE Technologies** of Boston, Massachusetts, has employed the utility computing model to satisfy the IT requirements of many of its small and mid-size clients.*

## Critical IT Issues Facing Small and Mid-Sized Organizations

Information technology (IT) has become an integral part of the day-to-day operations of every organization, large or small. Just as companies depend on electricity to operate, so does nearly every public and private organization depend on IT to conduct business today.

Whether it's communicating via email or doing business via eCommerce, organizations of all kinds are now dependent on their computer and networking systems to perform their internal and external activities.

Yet, *few small and mid-size businesses (SMBs) or government agencies with fewer than 500 end-users have the in-house resources to keep pace with their day-to-day IT operations needs.* Unlike most large organizations who can afford to hire a sufficient number of IT professionals or consultants to achieve their business objectives, most small and mid-size organizations can't afford the IT skills and resources to meet their needs.

As a result, many small and mid-size organizations view their computer and network systems as an aggravation more likely to disrupt their operations than support them.

### ***The Escalating Computing Challenges of Small and Mid-Sized Organizations***

Gartner, a leading market research firm, forecasts that SMB network traffic will increase at least 500% across wide area networks (WANs) and more than a 1000% across local area networks (LANs) during the coming years. Although comparable statistics are not readily available for government agencies, all indications point to a similar exponential growth in networking demand.

Despite this increased reliance, *small and mid-size organizations tend to be understaffed when it comes to selecting, implementing, and managing technology.* As an example of the problems this skills gap can create, Gartner estimates that 47% of small enterprises and 63% of midsize organizations lack written security policies to protect their valuable data.

Many of these organizations are also unhappy with the disproportionate costs of keeping their IT systems up and running. *In today's tough economic times, it is becoming harder and harder for small and mid-size organizations to justify these operating expenses.* As a result, all of these organizations are looking for a more cost-effective way of improving the reliability of their computer and networking systems so they can focus their limited time and resources on their core business.

### ***Small and Mid-Sized Organizations Turning to "Utility Computing"***

Frustrated by the escalating challenges related to acquiring and managing technology, a growing proportion of small and mid-size organizations are looking for alternative approaches to solving their ongoing computing needs. *Gartner predicts "utility computing" will be the fastest growing form of IT outsourcing through 2010, and small and mid-size organizations will be the fastest segment of the market to adopt this new IT services model.*

The next section of this whitepaper will define utility computing and describe how it works.

## **How 'Utility Computing' Works**

Many small and mid-size organizations consider computers and networking systems to be an albatross rather than an asset. But, with the right skills and

resources these systems can be very reliable, and represent a powerful 'utility' that enhances their business effectiveness.

*The 'utility computing' concept is based on the same principle as traditional power, water, or other public utilities. Just as traditional utility companies assure their customers a reliable set of services, utility computing companies make the same promise that their customers will receive a reliable level of computing power and associated set of IT support services to meet their business needs.*

Utility computing is designed to harness the power of technology to support an organization's business needs at a predictable cost. But, utility computing goes beyond simply providing generic computing or networking services.

Utility computing arrangements also include a full lifecycle of IT support services—ranging from up-front assessments to ongoing systems management—specifically catered to meet the individual business needs of each client organization.

These arrangements also simplify the contracting process and reduce the number of IT suppliers that small and mid-size organizations need to meet their business objectives.

### ***A Comprehensive, Proactive Solution for Meeting Small and Mid-Sized Organizations' Unique Computing Needs***

Under a utility computing agreement, the client organization and IT services provider determine the hardware, software, and networking technology requirements of the organization, and establish a systems and technical support plan that will meet those requirements.

*Based on this plan, IT systems and support are provided on a continuous basis under a contract agreement that includes a predictable fee structure, preventative maintenance and proactive management services.*

Under the utility computing arrangement, the client organization and service provider agree on the types of end-user computing systems and software that are necessary to support the client's business requirements. Desktop or laptop configurations are identified. Software operating systems and applications packages are selected. And, networking and security systems are developed.

The utility computing service provider also assumes responsibility for deploying the technology, and implements a preventative maintenance and proactive management services plan to ensure the reliability of the technology. It is this continuous, preventative maintenance and proactive management services plan that sets the utility computing services provider apart from traditional value-added resellers (VARs).

This packaged services approach not only assures the client organization of a consistent level of services, but it also enables the client organization to more easily budget for their future IT needs.

The utility computing provider estimates the total cost per employee for a pre-determined set of IT services, and establishes an ongoing fee based on those costs. This gives the client organization more reliable computing capabilities, as well as more predictable IT costs. Given the predictability of this arrangement, it's not surprising that a growing number of small and mid-size organizations are adopting this type of 'strategic sourcing' arrangement.

This approach may sound simple, but it takes a combination of the right technical skills, support services, logistical systems and systems management capabilities to deliver utility computing services successfully.

The utility computing service provider must make the right investment in the hardware, software, management systems and skills that can be deployed and managed remotely or on-site in an easy, efficient manner. In this way, the utility computing services provider is putting "skin in the game" to provide predictable, proactive IT solutions that go beyond traditional IT service arrangements.

## Why Traditional Outsourcers Can't Deliver Utility Computing to Small and Mid-Sized Organizations

IT outsourcing has gained notoriety and acceptance over the past decade as a way of off-loading an organization's IT operations to an outside service company.

Utility computing may sound like an outsourcing arrangement, but it differs significantly from the mega-outsourcing deals that capture headlines, cost millions of dollars, and extend over five to ten years.

While traditional IT outsourcing is an accepted strategy for large organizations interested in relinquishing their IT operations to a third-party in order to improve their business effectiveness, few small and mid-size organizations have been successful adopting this approach. The following are some of the reasons why traditional outsourcing hasn't fit the IT computing needs of small and mid-size organizations.

### **Key Limitations of Traditional Outsourcers**

There are three reasons why traditional IT outsourcing hasn't been successful among small and mid-size organizations.

The first is the nature of outsourcing agreements that typically include strict contractual arrangements that favor the outsourcer more than the client organization. In order to ensure the profitability of their outsourcing agreements, outsourcers structure their contracts to limit growth and change in the client's IT environment. This inflexible approach doesn't fit the constantly evolving computing requirements of small and mid-size organizations. *Utility computing agreements recognize the continuous change within small and mid-size organizations, and provide a more flexible approach to addressing these changes.*

The second obstacle to success with traditional IT outsourcing arrangements is the nature of the major outsourcing companies. These companies—including IBM, EDS, and CSC—are vast organizations who were built to serve equally large corporations. The vast resources that enable them to address the complex needs of major corporations worldwide require they focus on large, multi-year, multi-million dollar contracts that far exceed the needs of small and mid-size organizations. *Utility computing providers have specifically designed service delivery systems and staffing models that scale to meet the narrower IT needs of small and mid-size organizations.*

Thirdly, small and mid-size organizations generally lack the in-house relationship management resources and skills to properly administer and supervise a traditional outsourcing arrangement. They are also less likely to sign multi-year agreements that could limit their way of doing business when their very existence might depend on making fundamental changes to their operations. *Utility computing services are structured to permit more collaborative working relationships between the service provider and client organization.*

## Why Traditional VARs Can't Deliver Utility Computing Services to Small and Mid-Size Organizations

Traditional value-added resellers (VARs), who many small and mid-size organizations have historically turned to for IT equipment and services, are not geared to helping small and mid-size organizations manage their day-to-day IT operations.

*Instead, VARs tend to be focused on providing simple installation and maintenance services for specific vendor products, or horizontal or vertical market applications.*

The range of products and services necessary to deliver utility computing services exceeds the skills of most VARs.

### ***What makes utility computing different than a typical VAR contract?***

Many small and mid-size organizations rely on local value-added resellers (VARs) to supply their hardware, software, and networking equipment and services. These companies have built a loyal customer base by delivering quality products and services. But, VARs generally offer a limited range of products from preferred IT hardware and software vendors, and a narrow set of services to install and maintain those products. *VAR services tend to be reactive rather than proactive, focused on fixing problems rather than preventing them.*

Because VARs specialize in specific IT areas or on particular products, small and mid-size organizations have historically been forced to work with multiple suppliers to meet their full IT needs. Now, a growing number of organizations are looking to establish 'strategic sourcing' arrangements that can simplify

their IT management requirements by reducing the number of suppliers they use. And, they are looking for suppliers who can not only fix their IT systems when they break, but proactively manage their operations to minimize the risk of failures that could harm their business, and advise them on their future IT needs.

*A utility computing arrangement goes beyond VAR agreements because the supplier provides a full range of technology solutions supported by an array of managed lifecycle services starting with needs assessment, planning, and design, followed by installation, integration, and certification, and continuing with ongoing support that includes proactive management, as well as remedial maintenance. This ensures a greater return on investment (ROI) for small and mid-size organizations.*

### **What are VARs missing?**

The VARs' business model depends on specialization, either on a specific set of hardware and software products, or type of business solution. Because they generate their margins on product sales and related service agreements, they must sell as many products and basic maintenance contracts as possible, rather than optimizing the performance of the customer's IT operations and reducing the total cost of ownership (TCO) of those operations through on-going, managed service arrangements.

*As a result, VARs generally employ IT technicians who are good at installing and fixing hardware and software they sell, but are not skilled or incented to integrate, maintain, and manage their customer's IT operations under a predictable, affordable fee structure that maximizes the customers' technology investment.*

## **CBE Technologies: Doing Utility Computing Right**

One company in the vanguard of delivering utility computing services is Boston-based CBE Technologies. CBE has developed a comprehensive technology deployment, management, and maintenance program suite, called OneStop Services, that provides clients with a proactive IT solution at a predictable price.

CBE was founded in 1984, and has over 2,500 clients, including:

- Peabody Office Furniture
- Colby College
- The Commonwealth of Massachusetts
- Timberland
- Fidelity Investments
- Children's Hospital
- Bayer Diagnostics

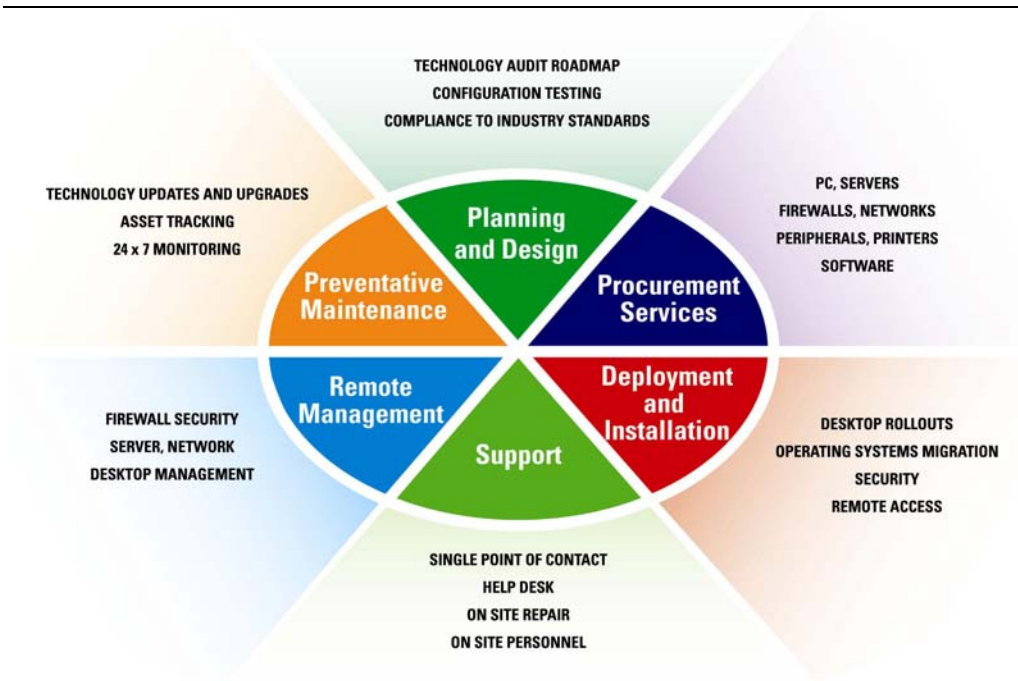
*CBE Technologies has made the necessary investments in automated technology deployment, proactive management systems, and skilled staff to deliver utility computing services that are satisfying its small and mid-size clients' needs.*

### **CBE Technologies' OneStop Services**

CBE Technologies' OneStop Services are specifically designed to satisfy small and mid-size organizations' IT hardware, software, networking, security, and staffing needs.

Before CBE recommends a specific IT solution, CBE's engineers conduct a thorough assessment of clients' existing IT systems and identify hardware, software, and networking upgrades to stabilize the environment and make it operate more reliably.

CBE then puts a program in place to manage all of its clients' IT procurement, installation, support, backup and recovery, security, remote management and monitoring, and maintenance with technology update needs on an ongoing basis for one predictable reoccurring fee.



Source: CBE, 2002

### **CBE's OneStop Lifecycle Utility Computing Model**

CBE's OneStop services help companies manage their changing desktop computers, servers, and remote access needs. CBE's OneStop turnkey service supplies each employee with the computer they need loaded with up-to-date desktop and networking software, and provides the ongoing support to keep them up and running, including helpdesk, remote and on-site repair,

and software patches and updates. In addition, CBE monitors and manages the company's email servers, print-and-file servers, and storage devices.

CBE also covers all of the client's security requirements, including virus protection, backups, firewalls, and virtual private network (VPN). Under OneStop, the client gets all this support for one simple reoccurring fee.

*CBE's OneStop Services utility computing approach focuses on delivering a dependable level of IT functionality supported by proactive management and problem prevention rather than merely reactive 'fix-it' services. The result is a reliable IT service program that increases the small and mid-size organization's productivity, reduces their IT costs, and helps them achieve their business objectives.*

### **CBE Technologies' Clients Praise OneStop Services**

**Peabody Office Furniture**, a Boston area company, needed to stabilize and systematically expand its IT operations to support its growing regional business.

The company turned to CBE's OneStop Services to reduce its PC, server, and network failures and establish a more reliable IT environment that would enable its workers to be more productive. CBE has also implemented preventative systems management and repair services for Peabody Office Furniture's servers, PCs, printers and networks.

Equally important to stabilizing Peabody Office Furniture's IT systems has been establishing an effective computer security and virus protection program to reduce the risk of external threats or internal disruptions.

*"As a result of CBE's OneStop Services, Peabody Office Furniture has experienced a 20% improvement in its computer and communications reliability and performance,"* according to Mark Anderson, CFO of Peabody Office Furniture. *"CBE has enabled us to reduce our in-house IT staff and total IT support costs while ensuring greater business continuity because we don't have the computer and network failures of the past."*

Another CBE OneStop Services client is **Oridion Systems, Ltd.**, an Israeli medical device company with U.S. operations headquartered in the Boston area, specializing in patient safety monitoring and products for diagnosis and management of gastrointestinal disorders.

CBE's OneStop Services were adopted by Oridion to satisfy four IT requirements.

First, from the strategic viewpoint, the company partnered with CBE to manage its U.S. IT operations, including placing a CBE IT director at its Boston area site. This arrangement ensures open and continual communications with Oridion's corporate headquarters in Israel, allowing the U.S. IT needs to comply with overall worldwide strategic planning.

Second, CBE Technologies provides complete server and network management services. This entails complete support, network administration and management via remote connectivity; and on-site personnel supporting back office operations and the network itself.

Third, CBE's OneStop Services provide 24x7 support to Oridion's corporate users and field consultants across the United States. Support includes helpdesk, on-site PC repair, technology management with software updates, managed virus protection, data backup, and business security.

Finally, CBE is supporting a corporate-wide move to migrate all of Oridion's field consultants to standardized IT hardware and software. This will bring new levels of interoperability to Oridion, resulting in greater employee productivity and better customer service. As a result of CBE's OneStop Services, Oridion's IT operations are now delivered in a single packaged solution at a fixed annual cost.

*"CBE's OneStop Services have enabled Oridion to accelerate its growth in the U.S.," states Avi Mizrachi of Oridion. "Their utility computing solution also gives us a flexible way to support the changing needs of our staff and clients."*

## Conclusion: Making Utility Computing Work for You

More and more small and mid-size organizations are discovering the benefits of utility computing. In the past, these organizations had to employ a full-time staff and contract with a variety of IT equipment sales, installation and maintenance companies to keep their computers, networks, and peripherals working. Now, they have an alternative.

Whether they are facing ongoing desktop, server, storage, security, or remote access management issues, utility computing offers a cost-effective solution to their IT needs, and more flexible alternative to traditional outsourcing arrangements and proactive approach than traditional VAR maintenance agreements.

If you are a small or mid-size organization, making utility computing work for you requires that you work with a service provider that has made the proper IT systems and staff investments to reliably deliver their IT deployment and management services, and has a satisfied client base that demonstrates a track record of success.

*CBE's OneStop Services is a clear example of how utility computing can successfully address the IT 'lifecycle' support needs of small and mid-size organizations. Their flexible program addresses each phase of the IT lifecycle, and can satisfy a small or mid-size organization's IT requirements at a fraction of the cost of traditional approaches.*

*CBE Technologies has made the investment in systems, staff, and skills to fulfill the promise of utility computing. As a result, CBE has a growing list of satisfied clients leveraging its OneStop Services to satisfy their IT needs and meet their business objectives.*

More success stories like CBE's OneStop Services at Peabody Office Furniture and Oridion Systems Ltd. will lead to greater market acceptance of the utility computing model among small and mid-size organizations in the coming years.

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*For more information regarding CBE Technologies, visit [www.cbetech.com](http://www.cbetech.com).*

### **About THINKstrategies**

*THINKstrategies is a strategic consulting services company formed specifically to address the unprecedented challenges facing IT managers, solutions providers, and investors today. The company's mission is to help our clients re-THINK their corporate strategies, and redirect their limited resources to achieve their business objectives.*

*For more information regarding our unique services, visit [www.thinkstrategies.com](http://www.thinkstrategies.com).*