

Desktop Outsourcing with Instinct 2.0

Meeting the Disparate Needs of Organizations and
End-Users



Contents

1	Abstract	3
----------	-----------------	----------

2	Problems with Traditional Desktop Computing	4
2.1	Higher TCO	4
2.2	Mass Deployment Challenges	5
2.3	Large Security Surface	5
2.4	Time Complexity and Transition Risk	5

3	The Difference between Traditional and Outsourced Desktop Computing	6
3.1	Traditional Desktop Computing Defined	6
3.2	Desktop Outsourcing Defined	6
3.3	The Difference between Traditional Desktop Computing and Desktop Outsourcing	6

4	Components of Capgemini's Desktop Outsourcing Service	8
4.1	Standard Operating Environment	8
4.2	Application Delivery	9
4.3	Messaging and Collaboration	9
4.4	Security	9
4.5	Service / Help Desk	9
4.6	Systems Management	10
4.7	Branch Office in a Box	10

5	Benefits of Capgemini's Desktop Outsourcing Service	11
----------	--	-----------

6	To Learn More	12
----------	----------------------	-----------

7	About Capgemini	12
----------	------------------------	-----------

Abstract

Over the past decade traditional desktop computing has become more complex. End users have demanded a customized desktop resulting in the emergence of a heterogeneous desktop environment. The download of unauthorized software adds to the problem. As a result, enterprises face significant deployment challenges because of so many different images. TCO has crept higher, management has become more challenging and the risk of low performance and availability has risen. Enterprises are spending far more resource on this non-core item than is necessary.

IT staffs have found it nearly impossible to build a desktop environment that is standardized. If anything, they have leaned towards the needs of end users but have paid a steep price. Lacking standardization, taking advantage of desktop scale and the lower cost associated with it has become virtually impossible.

There are colossal differences between traditional desktop computing and desktop outsourcing. Compared to traditional desktop computing, desktop outsourcing provides a lower level of desktop computing risks, easy access to state of the art technologies and lower unit costs.

Facilitated by a Standard Operating Environment (SOE), components of Capgemini's Desktop Service include: application delivery, messaging and collaboration, security, service/help desk, systems management, and Branch Office in a Box.

The benefits of desktop outsourcing with Capgemini are many and include lower risk mass deployment, low TCO, high performance and availability, a smaller security surface, and an ability to focus on project's core to the business.

Problems with Traditional Desktop Computing

Problems with Traditional Desktop Computing:

Higher TCO

Mass deployment challenges

Lower levels of performance and availability

Large security surface

Time, complexity and transition risk

Over the years traditional desktop computing has placed ever increasing computing power in the hands of organizational end users. The result has been clear: faster access to information, enhanced collaboration and ever higher levels of productivity and creativity. However, as more power has been placed in the hands of end users they have demanded and acquired non-standardized computing methods and devices. Today there is a dizzying array of hardware and software combinations to manage.

When it comes to desktop computing, organizations and end users have disparate needs. To achieve scale economies, low total cost of ownership (TCO) and a small security surface, organizations would ideally deploy a standardized desktop environment with a small number of differing images. Realistically, this desire is not possible because of so many different groups of end users they must support, the large number of speciality applications used, desktop technology advances over time and the deployment of mobile devices.

Organizations have tried to strike a balance between their standardized needs and the customized needs of end users. In the pursuit of higher levels of productivity, creativity and collaboration, most organizations have leaned towards a higher level of customization than standardization. End users are generally happy with this situation and are unaware of the price organizations and the IT group must pay.

Over customization of the desktop environment burdens organizations in many ways:

- Higher TCO
- Mass deployment issues
- Lower levels of performance and availability
- Large security surface
- Time, complexity and transition risk

Higher TCO

Higher TCO is manifested in several ways. Expensive, incremental IT skill sets are required to manage the dizzying array of images present. Scale economy is lost in purchasing. Internal scale must be built in data centers, networking and other equipment including IT management functions. As the number of images increases, operational problems become more difficult to isolate resulting in a higher mean time to repair with lower levels of productivity. Support costs are higher than necessary because of complexity that comes with a large number of images to manage. For global organizations, a multilingual help desk is a necessity – with higher cost there, too.

Mass Deployment Challenges

While higher TCO is a critical issue, oftentimes mass deployment issues can be just as great. What happens when an organization must update tens of thousands of desktops at once? What happens when a new operating system becomes available? What happens when a new security patch becomes available? What happens when new employees are issued the “standard laptop” with different applications than were issued previously? All of this needs to be tracked, of course. It also means that there are differing builds that need to be updated, patched, managed and secured while ever higher levels of IT staff are required for these non-core operations.

Lower Levels of Performance and Availability

Outages occur frequently in organizations with many desktop images because when changes to the environment are made, chances are there will be end users who will have an affected permutation. With constrained resources, often a “good enough” approach is taken when it comes to using state of the art fault management, root cause analysis, and network, server and performance management capabilities. By not using state of the art management tools, mean time to repair is impacted, availability and outage issues persist and lower levels of performance and productivity are accepted.

Large Security Surface

The large number of deployed images in the desktop environment creates unnecessary security issues. As the number of images increases and more services and components are installed the number of viruses and other attacks increases simply because there are more things to attack.

With the desktop environment in an organization increasing in complexity, malware and anti-virus updates become more challenging and the IT group will often choose one solution set for security issues because of budget constraints (vs. purchasing anti-virus definitions from all the major providers).

Also, state of the art security protocols and tools sometimes do not get implemented because there is not enough funding left beyond the basics or no specialized skill sets available. Examples can include single sign on, desktop firewalls, file encryption, certificate services, multiple anti-spam and malware definitions, and network access protection. When outages or issues from not having deployed state of the art security occur, the cost is often paid on the back end at the service/help desk and with lower levels of availability and performance.

Time, Complexity and Transition Risk

Large numbers of customized desktop images create complexity from a design, deployment and management perspective. Large numbers also create the need for a lot of time and IT resource to be spent planning whenever changes to the desktop are contemplated – even the simple ones. With so many combinations of deployed desktop images in the organization, transition risk is high. Roll back provisions can be made to lower the risk of a transition or change issue creating end user work stoppages, but it is difficult to anticipate all potential outcomes. Regardless, this too takes resource away from core IT projects and is far from an ideal solution.

The Difference between Traditional and Outsourced Desktop Computing

Differences between traditional desktop computing and desktop outsourcing:

Risk levels

Access to state of the art technologies

Unit costs

Focus on non-core, routine desktop management vs. projects core to the business

Traditional Desktop Computing Defined

Traditional desktop computing is a component of systems management which is concerned with the management of all components of an organizations information technology (other components of systems management include database and network management). Traditional desktop computing includes management of laptops, printers, print servers, desktop computers, software suites, and mobile access devices.

Traditional desktop computing also consists of IT tasks, such as maintenance and installation of software and hardware, user permissions as well as virus and spam filtering. Ever larger amounts of administrative resources have been deployed to compensate for non-standard desktop computing, such as fighting viruses, malware, spam, and spyware.

Desktop Outsourcing Defined

Desktop outsourcing is concerned with external service providers providing processes, methodologies, tool sets, and capabilities relating to the management of laptops, printers, print servers, desktop computers, network connectivity, network, file and application servers, and mobile access devices. Leading providers tend to also offer remote infrastructure management and robust global service/help desks.

Further, desktop outsourcing services can include local management of desktop resources and resources supporting the desktop.

The Difference Between Traditional Desktop Computing and Desktop Outsourcing

Traditional desktop computing and outsourced desktop services are vastly different. Dissimilar levels of risk, access to state of the art technology and capabilities, unit costs and ability to focus on core business issues are among the differences of note.

Risk levels are enormously different between the two approaches. Deploying updates or patches to the desktop installed base presents tremendous risk for the enterprise when they go it alone. It's very difficult to update tens of thousands of desktop at once or overnight – an outsourcer has knowledge, skill, experience and the tools to mitigate downtime risk. The desktop outsource approach will have multiple data centers with server redundancy, network redundancy, and fail-over capability. The vast majority of enterprises simply do not have sufficient resources left over after supporting the core business to also support the desktop environment as well as Capgemini can.

Access to state of the art technologies and capabilities can often be a deciding factor in outsourcing desktop management. It is very difficult and time consuming to scan the marketplace for the plethora of technology that must be amassed to support end users. It is also difficult to test competing approaches and technologies in a live environment, and then actually deploy it. Best in class desktop outsourcers, such as Capgemini, have built competencies around doing just this. Capgemini also has deep relationships with technology providers and very early access to their technology – this access is not generally available to enterprises. Constrained budgets act to prevent deployment of state of the art technology, too.

Unit cost differences can be great as desktop computing favors largeness and scale due to the large number of access nodes in a desktop network. There are several types of scale economy present that can drive down the unit cost of desktop computing. These include procurement cost, software licensing cost, labor arbitrage, knowledge, skill and experience, the network effect of a global help/service desk, labor and equipment utilization. All told, unit cost with a desktop outsourcer will be less than provided by internal IT groups.

The opportunity cost of spending valuable time on desktop computing is high for many organizations when this time can be more productively spent in areas providing competitive advantage. Routine management and support of the desktop can take up to half of the time of the IT group.



Components of Capgemini's Desktop Outsourcing Service

Components of Capgemini's Desktop Service:

Application Delivery

Messaging and Collaboration

Security

Service / Help Desk

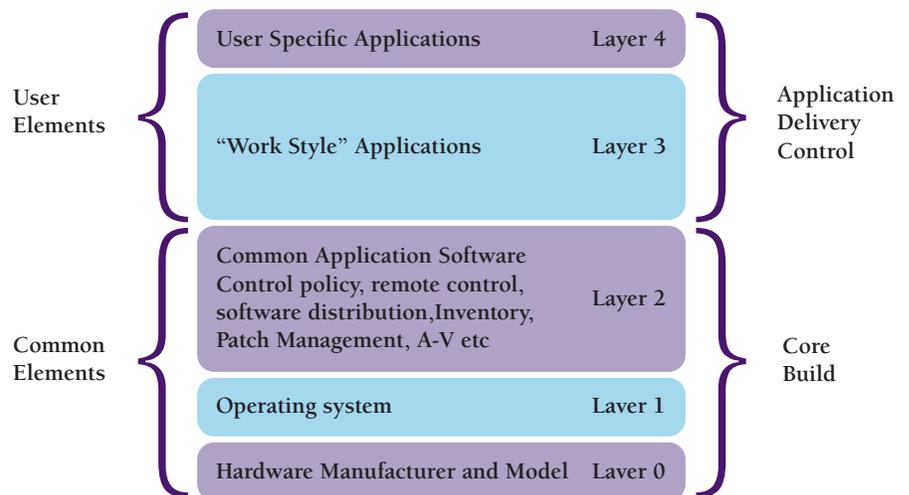
Systems Management

Branch Office in a Box

Capgemini provides six major components with its desktop outsourcing service. Those six components are: application delivery, messaging and collaboration, security, service/help desk, systems management and Branch Office in a Box. Before outlining the six components, however, it is helpful to understand the foundation of the service: the Standard Operating Environment (SOE).

Standard Operating Environment

To standardize the desktop operating environment and gain scale advantages, Capgemini leverages pre-built, pre-deployed modular components. It then builds a standard operating environment (SOE) that is customized for end users and groups from these modular components.



An SOE is a combination of hardware, operating system, common application software, work style applications and user specific applications built for a specified user or group of users. By using SOEs, a core build can be standardized across the organization yielding tremendous opportunity to build in scale.

Customization occurs by mapping the requirements of groups and users then adding necessary custom components to the lower layers of an SOE build. The result is a series of custom desktop images built from standardized components to meet end user requirements. It is in this way that a dynamic desktop service can now meet the previously conflicting needs of organizations and end users.

Application Delivery

Application delivery is concerned with both the manner and method by which applications are delivered to end users (server vs. thin client, local vs. remote, virtualized, distribution technology used) and the actual applications delivered to end users. Over the years, Capgemini has built specialized technologies and delivery methodologies to update thousands of desktops at a time at low risk.

Typical benefits compared to traditional desktop computing include fast, lower risk mass deployment, application streaming used for improved virtualization performance, rapid delivery of applications using streaming, flexibility in client architecture, on-demand delivery of IT resources, and reduced time and cost to make applications available for delivery.

Access to the latest, most up to date software is enabled by Instinct 2.0. Examples include Microsoft Exchange, Lotus Notes, Microsoft Windows Mobile, Windows Server, both Citrix and Microsoft Terminal services for thin-clients, OS support ranging from Windows 2000, Windows NT, Windows 98, Windows Vista, Office 2007 productivity software, and others including software as specified by clients.

Messaging and Collaboration

Another key component to Instinct 2.0, messaging and collaboration tends to be highly requested by end users due to its productivity enhancing nature and integrated ease of use. While Microsoft Office Communications Server and Exchange are included standard, either Cisco Unity Call Manager or Dialogic may be optionally specified.

Clients place messaging and collaboration high on their list when considering desktop outsourcing because of the importance of anywhere access to information, lower TCO from the integration of differing operating environments, lower potential travel cost, and greatly enhanced end user productivity.

Security

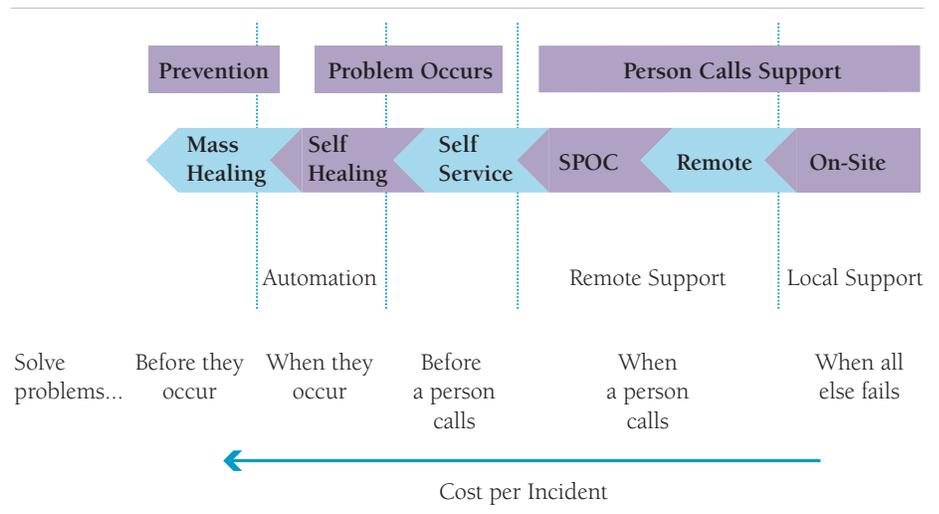
While the standard operating environment helps to reduce the security surface, there are several advanced security features of note included with Instinct 2.0. If specified, every client desktop can be deployed standard with a firewall. Identity and access management are included while directory management includes the use of active directory and/or LDAP. Further, policy based management is made possible through the use of a Quest active roles server. Microsoft Forefront is utilized for client, server and edge security.

Clients are especially excited to hear that virus definitions from Kaspersky, Sophos, CA, Virus Blaster and Norman are all included, and these definitions serve to protect email, document storage, servers and the desktop itself. Single sign on provides productivity gains and fewer requests for password requests, less complexity and hassle.

Also included in the security component are certificate services, file encryption, mail protection, network access protection, SSL VPN, real-time auditing and configuration management, anti-spam and anti-malware capabilities.

Service / Help Desk

Leveraging an established, global, multilingual Service / Help Desk means gaining accumulated experience, knowledge bases, people skills and toolsets in a strategy designed to prevent problems or resolve them as early as possible in their lifecycle.



The prevention of problems before they happen with proactive systems management combined with more effective patch management creates higher levels of performance and availability. Self-service, automation and workflow tools allow users to manage everyday tasks and issues quickly without the need to invoke one on one support costs. Problem management, remote toolsets and knowledge management empowers a single point of contact on the Service / Help Desk to take full ownership and resolve issues quickly. Immediate access to highly skilled, multilingual technical staff and the use of root cause analysis tools by IT staff ensure incidents are understood and added to the knowledge base for fast future resolution. Overall, a well-executed support delivery strategy yields significantly faster mean time to repair for both reduced cost and higher productivity.

Systems Management

To enable industry leading Service Level Agreements (SLAs), Capgemini has deployed state of the art management and monitoring technology, employed highly skilled and specially trained personnel and is using decades of built up knowledge to deliver 24x7x365 global monitoring and management at 24 globally located Capgemini infrastructure management control centers.

With Capgemini, the complete lifecycle of desktop computing is managed. All clients are proactively monitored and remote control and remote diagnosis capabilities allow Capgemini engineers and technicians to reduce mean time to repair and guard against risks to end-user productivity.

Systems management tools deployed include inventory management, capacity planning, network, system and fault management tools, active management technology and root cause analysis. Combined with decades of experience and trained personnel with up to date knowledge, Capgemini manages over 1 million end-user desktops already.

Branch Office in a Box

Flexible, anywhere, fast provisioning of distant geographies and offices has never been easier and is enabled by new Branch Office in a Box (BOB) capabilities. While distant office performance is assured with the use of BOB TCP acceleration and caching, enhanced availability is assured through the use of automated failover.

For many clients, the use of BOB assists with server centralization and consolidation efforts.

Benefits of Capgemini's Desktop Outsourcing Service

Desktop Outsourcing Benefits:

Mass deployment capability

Lower TCO

Higher performance & availability

Higher productivity

Smaller security surface

Ability to focus on core projects

The benefits of Capgemini's desktop outsourcing service are many. First and foremost, mass deployment experience and capability are employed during transitions and updates. With Capgemini, when updates, patches, new applications, operating systems or other transitions need to be made, scalable one-to-many tool sets and methods are used resulting in lower risk transitions. With Capgemini thousands of desktops can be provisioned overnight.

Beyond mass deployment, lowering TCO is a significant benefit of desktop outsourcing with Capgemini, which is manifested in several ways. It would be difficult – if not impossible – for most enterprises to match the scale that Capgemini has built to support over one million desktops already. This scale includes a global network of pre-deployed and pre-built services and infrastructure components, such as thousands of servers, a network over which traffic flows, access to applications, and a systems management implementation that is among the best in the world. Leveraging current virtualization technologies has been proven to provide significant cost savings, too. Decades of experience with desktop methodologies combined with scale lower desktop unit cost significantly.

Performance and availability are key factors to consider when evaluating an external service provider for desktop outsourcing. When you choose to outsource with Capgemini, we offer some of the strongest SLAs in the industry because we have among the best equipment, process, systems management software and people in the business.

Productivity savings can be significant as end users take advantage of the latest desktop technology and software application capabilities sooner than they might otherwise by accessing a global provider's service.

Further, savings from accessing a scale of security services can be substantial, too. While an SOE lowers the security surface of a desktop environment, those desktops connected will experience fewer cases of lost productivity and downtime while access to constantly updated anti-virus and anti-malware facilitates better protection at lower cost. In addition, leveraging VPN services, certificate services, the use of standard client firewalls, desktop and server hardening and real-time auditing likely secures the enterprise better than it would have been previously. The mass deployment of patch updates combined with service level management lessens the need for costly IT skill sets.

Choosing the right technologies can enable further cost savings. For example, while the latest processors and active management technologies deliver superior performance, when integrated into advanced systems management they greatly reduce desktop power consumption.

To maximize success, choose a service provider with:

- Global scale and reach
- Established partner ecosystem
 - Insight and Influence
 - Direct access to exclusive resource
 - Early access to technologies and roadmap
- Broad industry experience
 - Consulting, Technology and Outsourcing expertise
- Industry-specific knowledge and insight

Lastly, choosing to outsource desktop management to an expert allows the enterprise to focus on other projects that are core to the business. When desktops are attached to a best in class network and the massive scale of tens of thousands of servers pre-positioned worldwide, guaranteed industry leading service level agreements can be implemented and IT staff can be freed to work on more strategic issues.

Capgemini has the global scale and reach necessary to lower the cost of desktop computing for your enterprise. We have broad industry experience in consulting, technology and outsourcing with industry specific knowledge to make the benefits of outsourced desktop computing pay off for your organization.

Say goodbye to opportunity cost and learn more about desktop outsourcing with Capgemini.

To Learn More

Visit http://www.capgemini.com/Instinct_2.0/ to learn more about Capgemini's desktop services.



About Capgemini and the Collaborative Business Experience

Capgemini is part of a group that is one of the leading consulting, technology and outsourcing providers worldwide. Capgemini group employs over 83,000 people, in more than 30 countries and reported 2006 global revenues of € 7.7 Bn. Outsourcing grew by 25% in 2006 to €3.008 billion, employs nearly 17,000 professionals and accounts for approximately 40% of revenues.

Through a collaborative approach, Capgemini has a unique way of working with our clients, called the Collaborative Business Experience. Backed by over three decades of

industry and service experience, the Collaborative Business Experience is designed to help our clients achieve better, faster, more sustainable results through seamless access to our network of world-leading technology partners and collaboration-focused methods and tools. Through commitment to mutual success and the achievement of tangible value, we help businesses implement growth strategies, leverage technology, and thrive through the power of collaboration.

More information about our services, offices and research is available at www.capgemini.com.

