



MANAGING EBUSINESS COMPUTING INFRASTRUCTURE

WHITE PAPER

Before the Internet took center stage, the IT environment comprised PCs, servers, and mainframes, all linked by simple networks supporting common applications.

Enter an enterprise today, and this environment can sometimes look like a technology showroom, with a multitude of wireless portable devices, various application services, and next-generation services. These devices are layered on top of an already heavily equipped workplace. Factor in the demands that both employees and customers place on these systems, and suddenly the process of making an investment decision about how to support this environment becomes rather daunting.



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In today's ebusiness world, IT professionals are feeling overwhelmed by the complexity of the company's IT and network environment.

The decision-making process 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 infrastructure should be to support the demands placed on it; and how effectively company's can manage this environment to support corporate business objectives.

Even if a company has a clear ebusiness strategy, it may face challenges on how to integrate with legacy systems, access remote geographies, and support an increasingly mobile workforce. Perhaps most important, company's may not have the resources — time, personnel, or financing — to do it all itself.

Some of the “pain points” that the 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:

- Ensuring bandwidth capacity and traffic loads at predictable costs to support mission-critical application environments
- Providing a scalable, secure, and highly available computing infrastructure that minimizes costs while ensuring service quality
- Managing a multitude of best-in-breed service providers and product vendors needed to support the highest degree of service delivery
- Controlling network and systems complexity and obsolescence, while managing an increasingly expanding infrastructure
- Competing in an environment where rapid time-to-market and expanded geographic reach are critical to success

The combination of these pain points and the challenge of hiring and retaining operations staff force many businesses to lose focus on their core competencies. Instead of investing internal resources, companies should focus on their core business competencies while outsourcing the IT infrastructure headaches to an external service provider.

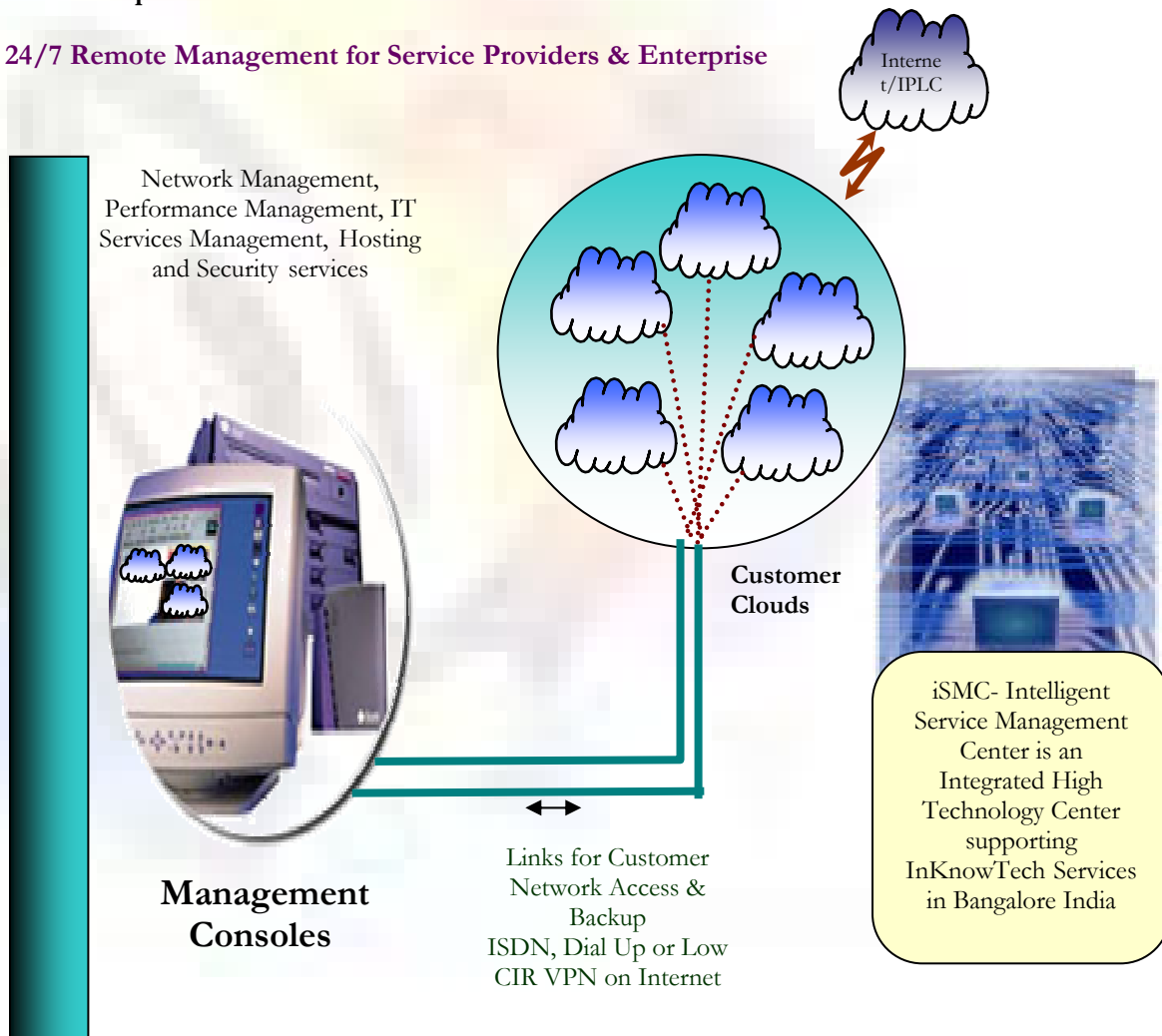
Many companies are turning to external service firms to assist in the development and management of their ebusiness computing infrastructure — from the network to the desktop. IDC recently completed 940 interviews with IT decision makers as part of its *eWorld* survey. The study showed that 92% of organizations 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 number of firms turning to external service firms to manage their computing infrastructure on an ongoing (24 x 7) basis will continue to rise. The study also found that 80-85% of the operations can be managed from remote locations, saving the organizations about 30-40% of the costs.

Emergence of the Computing Utility Service Infrastructure

Traditionally, management of the computing infrastructure (e.g., servers, networks, storage) for customers has been provided as an onsite service and is commonly referred to as outsourcing. However, the emergence of the Internet and a broad array of enabling technologies is shifting the delivery of these outsourcing services, which are called *managed* or *managed operations services*, into the Internet data center. These services are then delivered back to the customer. This shift is also giving rise to the provisioning of these outsourced services as part of a computing utility offering in which customers purchase computing services based on capacity usage, or, in layman's terms, "buy by the drink."

The model of an end-to-end computing utility service involves both the management of the computing infrastructure and the "last mile" connection, whether it be the location of the PC or a portable device.

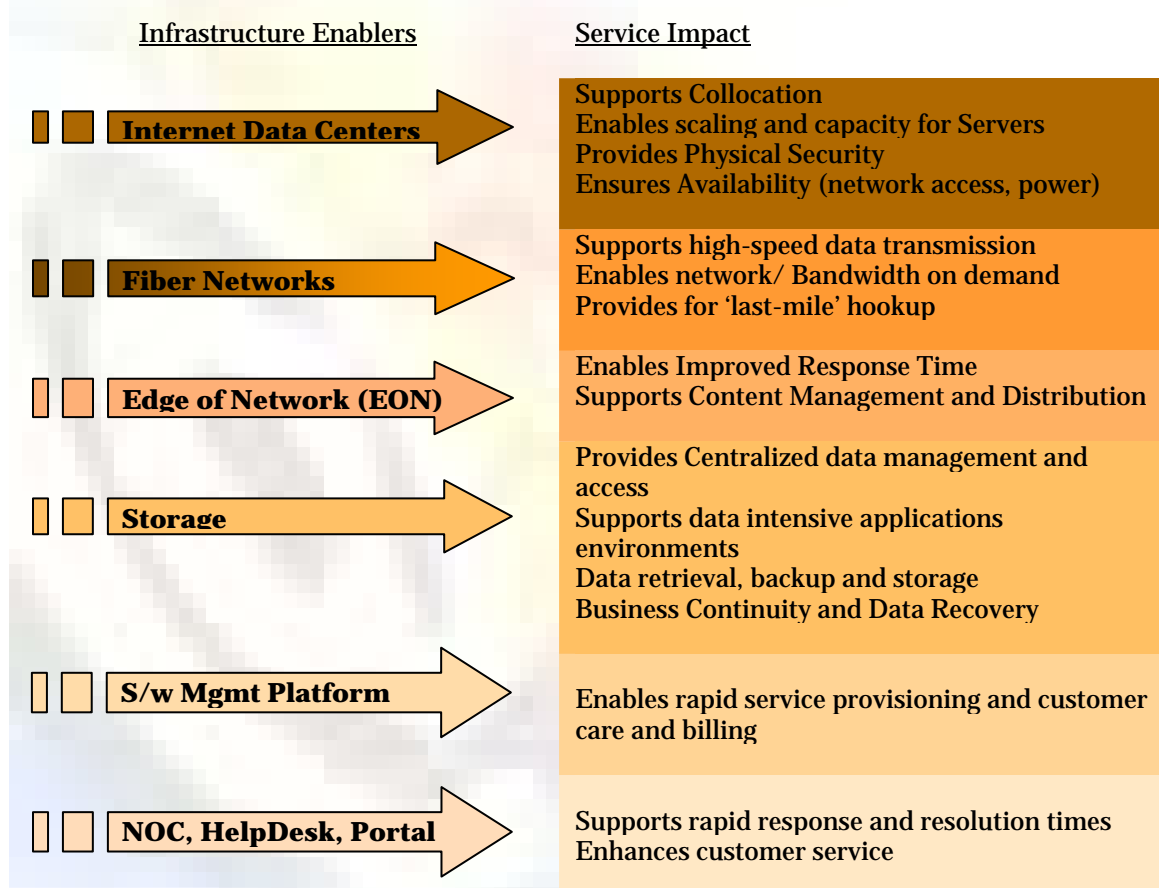
24/7 Remote Management for Service Providers & Enterprise



Key Characteristics of Providing Robust Managed and Collocation Services

Service providers looking to compete and succeed in this emerging space must consider not only the key characteristics required to provide customers with managed “outsourcing” or “utility” services but also such services as collocation. These characteristics include a set of enablers that range from Internet data centers and networks to software management platforms and storage systems, each of which has a direct impact on the delivery of services. The figure below highlights how these “infrastructure” enablers affect key service capabilities.

Key Characteristics of providing Managed and Collocation Services



Source: IDC

InKnowTech strives to fulfill several, broad-based key customer requirements that include:

- Enabling near-100% service level agreements (SLAs) across an end-to-end computing infrastructure
- Supporting business strategies and the need for rapid time-to-market
- Ensuring a high quality of customer support
- Providing a scalable, reliable, and available infrastructure
- Supporting flexibility in service options

Distributing the infrastructure across multiple geographies will enable InKnowTech to support global customer needs. Remaining product agnostic will allow InKnowTech to provide the highest quality service by leveraging a set of best-in-breed technology platforms and systems that meet customers' needs for flexibility in choosing the appropriate architecture for their infrastructures.

Leveraging InKnowTech as a Provider to Manage an “End-to-End” Computing Infrastructure

InKnowTech has built a service infrastructure that is focused on providing customers with a globally distributed network and a set of virtual data centers that can deliver a broad array of Web-based services from point solutions to full management of a computing environment. In targeting Global 2000 companies, InKnowTech provides a broad set of services that can be captured within three primary categories:

- **Network provisioning and connectivity.** InKnowTech provisions end-to-end, fiber-based, broadband Internet networks and services including the last mile “hookup.” Through the company’s set of carrier-neutral packet-switching facilities, the company offers secure, fault-tolerant collocation services for xSP’s, Telecoms, and Enterprises to support switching and connectivity needs.
- **Collocation.** With its virtual data centers, InKnowTech provides a set of secure, fault-tolerant collocation services that leverage the company’s broadband network.
- **Managed services.** InKnowTech offers a set of managed services that includes the design, implementation, and management of IT, network and communication systems on a 24 x 7 basis.

Benefits of Working with InKnowTech: The Value Proposition

InKnowTech leverages this end-to-end infrastructure to deliver to customers a robust value proposition comprising the following six key features:

- **Enabling customers to focus on core competencies and business strategies.** InKnowTech’s ability to provide customers with the option to outsource various pieces of its computing infrastructure enables companies to focus on their core competencies and support their business strategies. By outsourcing to InKnowTech, customers can avoid the challenges of trying to keep pace with the rapid changes in technologies, meeting complex service requirements, and exhausting resources to hire, train, and retain qualified staff. Customers can focus on what they do best while maximizing their infrastructure investments.

- **Ensuring unlimited and scalable bandwidth needs at minimal costs.** Given the shift toward outsourced computing services from third party Internet data centers and the continued migration to data intensive, Web-based application environments, customers will increasingly demand reliable access to these environments. This shift will also require customers to leverage a more scalable infrastructure. It is this expected yet unpredictable demand that InKnowTech can support at fixed costs.
- **Accelerating migration of legacy systems to a Web-based environment.** InKnowTech's ability to support the migration of legacy systems to Web-based environments enables customers to maintain pace with the technological shift toward a common and increasingly global IP infrastructure known as the Internet.
- **Ensuring a single point of contact and SLAs.** InKnowTech is fully accountable for service delivery and fulfilling SLAs for any service offering. For customers, this level of accountability is critical in minimizing the potential "finger-pointing" that may occur when services are provisioned by multiple service providers. Consequently, the combination of full accountability and providing a single point of contact (SPOC) will ensure customers that InKnowTech will deliver on SLAs geared to supporting a near-always-on Web infrastructure. Furthermore, InKnowTech's ownership and, ultimately, control of this infrastructure will further enable the company to guarantee these SLAs.
- **Providing flexibility in customer service options.** Flexibility for customers to choose service options is a requirement that must be met. This need involves both the selection of services available and the choice of technologies and locations from which these services are delivered. InKnowTech meets these challenges by providing customers with options when selecting their service packages. These options can range from basic network services to collocation or even a fully managed environment. By offering *best-in-breed* technologies to support these services and offering customers the option of service delivery from the InKnowTech infrastructure or at their own premises, customers are given the flexibility to match their needs more readily.
- **Supporting expanding customers' needs with an end-to-end computing infrastructure and worldwide support.** Its breadth of service capabilities and infrastructure allows InKnowTech to offer customers an end-to-end computing infrastructure capability ranging from the IT environments all the way into the "last mile" of the network. Nearly 60% of IT decision makers in IDC's *eWorld* survey felt it was either "somewhat important" or "very important" for their external partner to provide an end-to-end solution. Providing such a comprehensive capability ensures that customers have access to services they may need as their infrastructure requirements expand. This accessibility should also enable customers to keep pace with changes in their service requirements while minimizing the risks of seeking additional services from or migrating to an alternative provider.

Conclusion

The management of a customer’s computing infrastructure continues to shift from the traditional model of delivering these services at the customer’s site to providing these same services from a remote location. This shift is having a dramatic, if not tectonic, impact on customers. Although this type of service delivery is not new, the scale of the computing infrastructure, its complexity, and the need to operate on a 24 x 7 basis are all significant changes. The ability to deliver these services anywhere to anyone via wireless technologies will further complicate the management of this increasingly complex infrastructure.

With its Web-based, end-to-end set of managed services and end-to-end infrastructure, InKnowTech is well positioned to manage these complex computing environments for each of its customers. By leveraging this breadth of delivery capability and service reliability, InKnowTech continues to establish itself as a leading provider of end-to-end ebusiness computing infrastructure services.

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