

Managing IT & Network Systems

The Paradox of IT & Network Infrastructure

Despite the critical importance of Information Technology (IT) assets, most of these assets today are not monitored in any real sense today. They are on networks and often troubleshooting is accomplished over networks, but the true integration of network and embedded intelligence is just starting in this arena.

On top of this, IT departments in corporations, governments, schools, and other organizations around the globe are critically understaffed. Although those in charge of staffing IT positions recognize the value of both IT assets and employees, hiring managers are often constrained by their organization's budgets. The inability to hire new employees to help manage IT assets leads to a dilemma, understaffed IT departments are forced to monitor an increasingly large and diverse IT and network asset base.

Data center and network failures are two problems that can have serious negative impacts on an organization. Either one of these two issues can cause losses in terms of information, revenue, and customers. Overall, it is no surprise that asset uptime in the IT world is extremely important. However, this brings about the question of how understaffed IT departments can be expected to ensure the health of rapidly expanding IT asset bases.

Although challenging, the question above can be addressed. Increasingly, pervasive networked solutions are being implemented to allow staffs to remotely monitor IT equipment and networks. Remote monitoring solutions that are implemented in an IT environment offer remote troubleshooting & bug fixing, preemptive problem solving & threat detection, remote maintenance, and increased security. Overall, these management solutions are helping to detect problems before they cause major problems, optimize network performance, and save money via reduced downtime.

Key Forces & Trends

Our society is at the cusp of a "perfect storm" of network connectivity. The concept of network effects states that the value of a network grows exponentially with the number of nodes connected to it. Along with the value, however, so too grows the complexity of managing the network, the difficulty of securing it, and the reliance of people and organizations on these networks functioning properly.

Most IT solution providers are rapidly becoming familiar with remote servicing and the potential value that can be derived from the adoption of this new approach, because of the related work that IT companies undertake in their main business segments. Decreased cost, coupled with increased revenues from

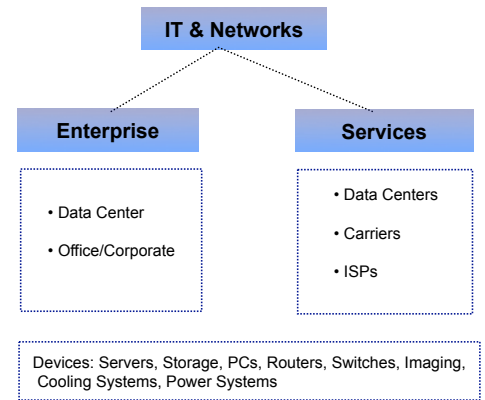
Harbor Venue Coverage

Venues and markets we address in our Pervasive & M2M research and analysis include:

- Energy & Power
- Industrial Systems
- Retail
- Smart Homes & Buildings
- Healthcare
- Physical Security
- Transportation
- IT & Comms Systems

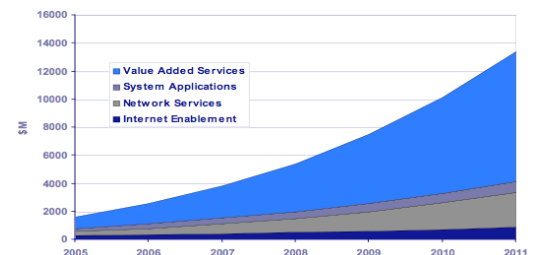
IT & Network Venue Segmentation

The IT & Network Systems Venue includes IT equipment - servers, storage, etc. as well as network equipment - switches, routers, etc. as well systems and devices to manage data centers and infrastructure



Venue Scale & Growth Potential

Value added capabilities and managed services within the IT Systems & Network Infrastructure Venue could grow to as much as \$15+ billion by 2012.



remote servicing activities will be the major drivers of widespread adoption. If the value can be clearly defined and proactively measured through a scorecard, CIO's can be convinced of the long term value of remote servicing and this will further speed the adoption of such methods and procedures.

From a customer standpoint, IT departments that seek to minimize the risk of failure of their IT assets will clearly push for implementation of remote servicing solutions. Here, the key driver for IT customers will be the ability of remote servicing solutions to increase asset uptime while decreasing downtime related losses of customers, information, and revenue. Finally, by proactively monitoring IT assets remote servicing plans can improve IT asset health, thus increasing asset longevity and reducing maintenance costs. Embedding networked intelligence into these systems allows users to:

- Detect faults & identify malfunctioning equipment
- Track usage patterns and intensity
- Provide remote visibility into product status
- Enable remote control and configuration
- Allow many common problems to be fixed remotely

The field intelligence makes product performance and equipment behavior visible as never before, providing unprecedented feedback and insight into the customer's needs. The value of the data gathered from remote diagnostics increases over time, as historical data and analysis can produce ever more accurate predictions of machine failure and maintenance needs, and ultimately providing vendors and partners a window into better understanding of mission critical network and IT assets.

IT networks are now handling systems and data of increasing breadth, spanning beyond traditional views of data networks. For example, building systems such as climate control, security, and lighting now operate over IP. Voice over IP has gained widespread acceptance, with video not far behind. Many business processes are becoming automated, such as supply chain management, procurement, and activity-based accounting. With the rise of true networked applications, all of these functions and processes have become dependent on communication over the internet, which requires a dependable functioning network. All of this illustrates that as more and more processes, systems, and services become dependent on a single unified network, the reliability requirements of that network, and similarly the consequences of downtime, increase dramatically.

We Clarify the Business Value

We understand that most potential adopters see the M2M / Pervasive Internet world as a daunting terra incognita. The technologies are difficult, the standards are constantly evolving, and the vendor landscape can seem fragmented and bewildering.

We make industry knowledge a key element of our toolkit. In order to keep ourselves fully up-to-date we perform continual analysis and research into specific markets and the maneuvers and strategies of the best performers. Our ongoing research gives us a rich context in which to view each client's opportunities and challenges.

We have direct consulting experience with virtually all the supply side and adopter segments within the over buildings arena

About Harbor Research

Harbor Research, Inc. has been providing strategic consulting and research services to leaders in communications, computing, control, equipment and content since 1983. Harbor's keen eye toward market results is manifest in all of our processes and tools, providing clients with the perspective they need to make best-informed decisions. We emphasize interactive analyses, the incorporation of outside perspectives, time-efficient workshops, and action-oriented decisions. Our multifaceted approach, ranging from the research we publish to the fully customized consulting engagement, provides optimal value to our clients and has also allowed us to develop important advantages as a firm.

Contact Us For More Perspective

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