

**Community Trip Report
IT Infrastructure & Operations
Gartner Symposium/ITxpo
Orlando, Florida
8-13 October 2006**

Key Takeaways

This Trip Report highlights the major sessions from Symposium/ITxpo for attendees interested in IT infrastructure and operations. It also encapsulates questions that conference attendees asked and forecasts some emerging issues to prepare for.

A recurring theme across many sessions was the need to run and manage IT infrastructure and operations (I&O) "more like a business." At the top level, running the I&O group like a business means:

- Aligning I&O activities, policies and metrics with the business' goals
- Clearly identifying and communicating the value that I&O provides to customers

The presenters noted that successfully achieving these objectives will become increasingly challenging, due to business' changing expectations of what the I&O group should do. For example, I&O leaders must juggle traditional responsibilities (such as reducing costs and ensuring quality service delivery) with mandates including improving enterprise agility, ensuring compliance, and controlling and optimizing a complex technology and service landscape.

To adapt to these mounting challenges, I&O leaders must structure their planning activities around three key opportunities:

- Virtualization
- Process automation
- Policy-based management (PBM)

Conference Highlights

These Symposium sessions were particularly valuable for I&O leaders:

"The IT Infrastructure and Operations Leader: Balancing Strategies and Operations"

Vice President and Distinguished Analyst Jay Pultz provided a road map for planning, prioritizing and managing the individual processes and functions that

comprise I&O. Gartner refers to this framework as the I&O Activity Cycle, and it is divided into four key actions/issues:

- Strategizing
- Planning/building
- Optimizing IT services
- Delivering IT services

Recommendations offered for some of the key actions in the Activity Cycle included:

- Develop a multiyear I&O plan, and in it, let detailed business requirements — not technology — drive the plan.
- When evaluating and selecting appropriate vendor technologies, Gartner's Hype Cycles (which include 29 that are I&O-specific, covering 1,330 technologies) are one useful tool. Another is Gartner's Scorecard Evaluation Model.
- To reduce I&O costs, develop an overall, systematic plan to consolidate infrastructure; baseline I&O total cost of ownership against peers to identify opportunities
- Automate IT operational processes, with the goal of moving toward end-to-end service delivery.

Improving IT operational processes requires taking a systematic approach. "Assume that this will be a multiyear process, and only automate processes once they're mature," Mr. Pultz said.

"Organizing and Staffing IT Infrastructure and Operations for Success"

Moving from a technology orientation to a business-needs orientation requires a re-evaluation of I&O organizational structure, skills requirements and metrics. Effective I&O groups can be organized in many ways, said Research Director Ed Holub, but it is important to select a structure that:

- Matches customers' needs
- Is aligned with current operational process maturity

As I&O organizations move toward process automation and standardization, the need to perform more-mundane tasks is reduced and roles more become process- and service-centric. Some recommendations for managing this transition include:

- Focus on less-technical key support roles (such as relationship managers and application development liaisons) to greatly improve the service group's success.
- Use more "versatilists" — who can apply their depth of skills to a rich scope of situations and experiences and fulfill multiple roles in multiple areas — to help build new organizational alliances, insight, competencies and roles.
- Employ matrix management to introduce process accountability alongside functional responsibility.

"IT Operations and Infrastructure Management Scenario: Raising the Bar"

IT operations management technologies will progress more between 2006 and 2010 than they did between 1995 and 2006. But the first step toward achieving I&O excellence — becoming a strategic partner with the business — is engaging in dialogue with customers, said Vice President and Distinguished Analyst Donna Scott. It's also important to establish and share metrics that demonstrate the value of the services provided. Approaches will vary, depending on how far the I&O group has progressed toward I&O management excellence. For example:

- I&O groups that are early in the journey should narrow their scope by laser-focusing on a specific customer pain point to build credibility and momentum.
- More advanced groups should focus on business service and process standardization and continuous optimization.

Models and frameworks, such as Gartner's IT Management Process Maturity Model and IT Infrastructure Library (ITIL), can help identify where to make the necessary sequential improvements.

"The Journey Toward I&O Excellence"

Vice President and Gartner Fellow Tom Bittman and Vice President Deb Curtis described how the IT Infrastructure and IT Management Process Maturity models may be used in parallel for a "multiplier effect." Both models are designed to improve IT service quality, reduce costs and increase business value and agility, said Mr. Bittman and Ms. Curtis, by helping organizations improve maturity in these key areas. Doing this involves:

- Understanding the IT organization's position.
- Building a vision for infrastructure and management process, defining common goals, end-user expectations, and service-level performance metrics between business, infrastructure and operations.

- Evaluating infrastructure and management processes against that vision.
- Building a strategic plan, using the maturity models as guidelines.
- Determining short-term goals and executing them.
- Measuring return on investment in terms of cost reduction, IT service quality improvements and agility improvements, in metrics that make sense to the business
- Periodically re-evaluating and adjusting the plan.

"The Future of Infrastructure and Operations"

Businesses will increasingly expecting their IT infrastructures to move toward a real-time enterprise model, said Mr. Bittman. This means being:

- Flexible
- Able to grow and contract incrementally
- Responsive to rapidly changing requirements
- Capable of delivering to business-oriented service levels

One key trend that I&O leaders must prepare for and adapt to: the days of the monolithic, general-purpose operating system will soon be over. New technologies, new modes of computing, and infrastructure virtualization and automation are changing the role of the operating system.

Other recommendations that Mr. Bittman offered for some trends that will influence the future of I&O included:

- To adapt to the accelerating pace of the consumerization of IT, focus on managing only what *must* be controlled.
- As new technologies and business models change end-user applications, explore software streaming and software as a service.
- With new forms of “disasters” continuing to evolve, plan and perform regular scenario planning.

IT Infrastructure & Operations Workshop

Seats went quickly for the first-ever IT Infrastructure & Operations Workshop. To reflect the broad scope of I&O leaders' responsibilities and concerns, participants were organized into three roundtable-style forums, led by Gartner analysts. During these interactive discussions, participants discussed three key issues:

- The challenge of communicating the business value of IT I&O to the business, using the key metrics that business understands. “We identified availability, speed, capacity and cost,” explained Mr. Pultz. “You want to relate these metrics to the business’ objectives.”
- Enterprises’ need to improve service delivery via a “quality service desk.” “Enterprises can look at the service desk in a routine fashion,” said Mr. Holub. “But these are the people who primarily interface with your customers, so there’s an opportunity to get better information and develop better metrics.”
- The struggle to control mobile devices (or “control devices that we can’t control,” as Vice President John Enck stated). Mr. Enck pointed out in a post-breakout discussion, “With many of these devices, there are associated hidden infrastructure costs — the tool ecosystem is immature, vendor support is poor at best, and there’s a high risk of information exposure. It’s cool if the CEO is running around with a BlackBerry, but not so cool if he or she doesn’t recognize the risk.”

What People Asked About

How concise must the multiyear plan be?

The multiyear plan can be a half-dozen pieces of paper or a PowerPoint presentation. It doesn’t have to be too thick, but it does take time and it does have to be well thought out. The key attribute of this plan should be that it’s about building consensus between different constituencies and different stakeholders, within and external to your IT organization. Also, remember that a vendor’s strategy is not your strategy for developing and architecting the multiyear plan.

How can I ensure that outsourcing is on board with my journey to I&O excellence, that they’re aligned with my objectives?

Outsourcers are feeling pressured by something other than just economics as their sales points. Increasingly more providers are adding agility statements to their marketing messages, and hopefully, to their service-level agreements. Any arrangement with an outsourcer should include expectations and written metrics for improvement over time — in economics, in quality of service, and in agility, based on the common language being built between business and IT. Go to your outsourcer and say, “Here are our metrics — can you meet these things?” Often they will say no, but it’s a good way for you to make your sourcing decisions.

What is new in IT operations management tools — what should I look out for?

It's encouraging to see some of the new architectures coming from vendors. They are opening up operations to go from event-level integration — which has been typical — to an entire level of data and pricing, and getting intelligence from the configuration management database. Right now we're seeing a lot of chaos in the details of who owns the configuration indicators, how do we reconcile and so forth. But there is light at the end of the tunnel, where you'll be able to call it business intelligence.

With all this talk about reuse and repeatability, how do you avoid having staff succumb to the “zombie factor,” or getting bored with repetition?

Many of the trends that we've been discussing as part of the migration toward I&O excellence are actually designed to free up staff to do more work that's innovative. For example, when you automate repeatable processes, your staff can focus on handling the complicated processes that only come up infrequently, and to get closer to the business' needs. We hope that by taking some of the repetitive tasks, documenting them and making them repeatable, we will actually foster innovation.

Key Findings From Polling

During “Do All Roads Lead to CMDB?” Vice President Ronni Colville asked session attendees questions related to their organizations' plans to implement configuration management database technologies. Here are some of the results.

Table 1. When are you starting a CMDB project?

	Number of Responses	Percentage of Responses
Currently in process	84	34.29%
Within six months	42	17.14%
In six to 12 months	48	19.59%
By year-end 2008	30	12.24%
Not planning a CMDB project	38	15.51%
Already completed	3	1.22%
Total	245	100%

Source: Gartner (October 2006)

Table 2. What is the status of your organization's use of IT service (configuration) dependency mapping tools to support IT configuration and change management needs?

	Number of Responses	Percentage of Responses
Purchased and in production	28	12%
Purchased and will be in production within six months	31	13%
Expect to purchase within six months	53	22%
Investigating with no expectation to purchase	88	37%
No interest at this time	36	16%
Total	236	100%

Source: Gartner (October 2006)

Table 3. Who in your organization has primary ownership of the CMDB?

	Number of Responses	Percentage of Responses
Asset management	12	6%
Service desk	36	18%
Architecture	21	10%
Data center/IT operations	99	50%
Application management	9	4%
IT security	2	1%
Other	21	11%
Total	200	100%

Source: Gartner (October 2006)

Things to Watch For

- With businesses demanding increased IT agility, economic accountability and service excellence, more I&O leaders will begin developing portfolios of standardized IT services, with repeatable process methodologies for service delivery and support. The ultimate goal is automating as many processes as possible.
- Virtualization is the most “impactive” thing changing I&O. The leading edge of this change is server virtualization. Mature server virtualization can provide benefits ranging from reduced costs to faster deployments, improved disaster recovery, and variable use accounting. As virtualization matures, the “next big thing” will be automating the composition and

management of virtualized resources, said Mr. Bittman. “Plan, implement and change now,” he advised.

- The I&O vendor landscape is undergoing transformation, via mergers and acquisitions. When tracking deals in the I&O vendor space between 1 March through 25 July 2006, Mr. Pultz found that 38 I&O deals were made, roughly representing 75% of the number of deals completed in all of IT during that time frame. The three “hottest” areas were IT operations, security and telecom, said Mr. Pultz, and “within IT operations, the hot areas were data management and systems/storage management.” Referring to deals like HP’s bid to acquire Mercury Interactive, he said, “It’s likely that some current product suites will change as a result of many of these acquisitions. More than ever, buyers need strong contracts.”
- PBM will resurge, particularly in networking management. PBM didn’t catch on in networking because of inexpensive bandwidth, said Mr. Pultz, but now, the focus is on newer application models and delivery mechanisms. “Policy-driven infrastructure is fundamental to the real-time enterprise, so its time is now,” he said.