Assessing the Monitoring Market and Maturity

Glenn O'Donnell
Program Director
Technology Research Services

gdo@metagroup.com

METAGROUP

The Changing Nature of Monitoring

- **The Users**
  - **How are users buying?**
  - **How will they be buying?**
  - **What do users want to accomplish?**
- **The Vendors**
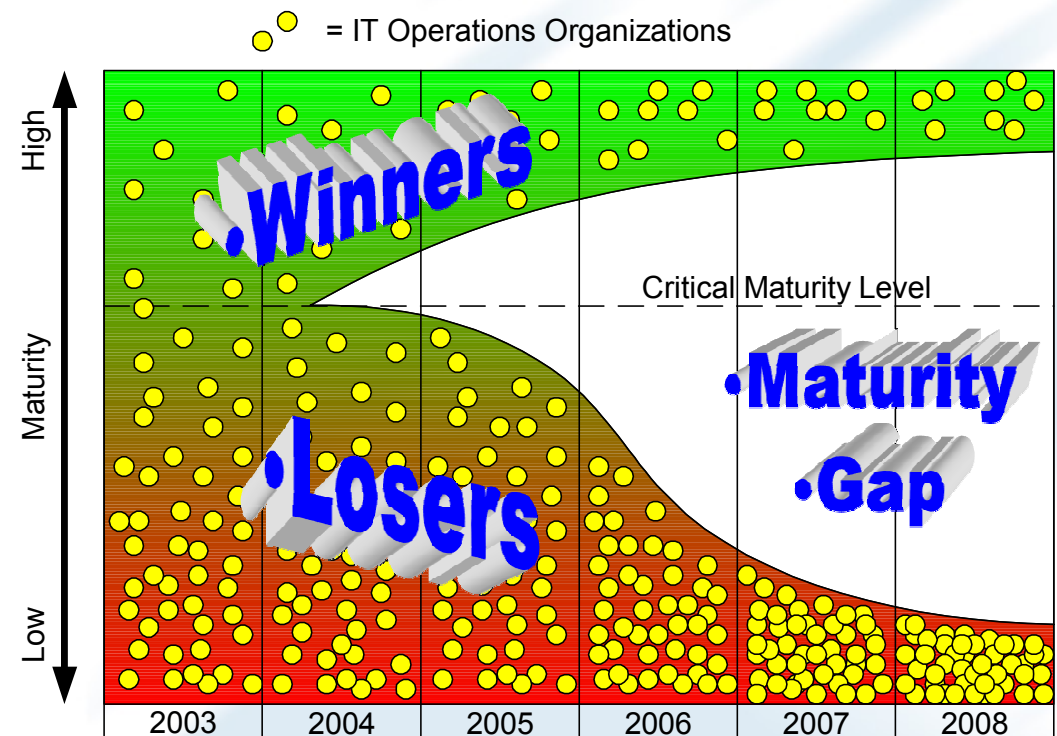 - **What is the state of current tools?**
  - **Why have many products languished?**
  - **What are vendors doing to evolve?**
- **The Forces of Change**
  - **How will the technology and process evolve?**
  - **How can we effectively leverage automation?**
 - **How do we attain true business value?**

Buyers are Maturing

- **Silo-focused purchasing remains strong**
  - ▸ **Buying to relieve pain is still common**
- **Process-focused purchasing is gaining traction**
  - ▸ **More strategy and "operational engineering"**
- **Enhanced maturity is not an option**
  - ▸ **Continued chaos in operations will lead to punitive outsourcing**
- **Successful ITOs will be responsive to change**

○ = IT Operations Organizations

Maturity (High / Low)

Winners

Critical Maturity Level

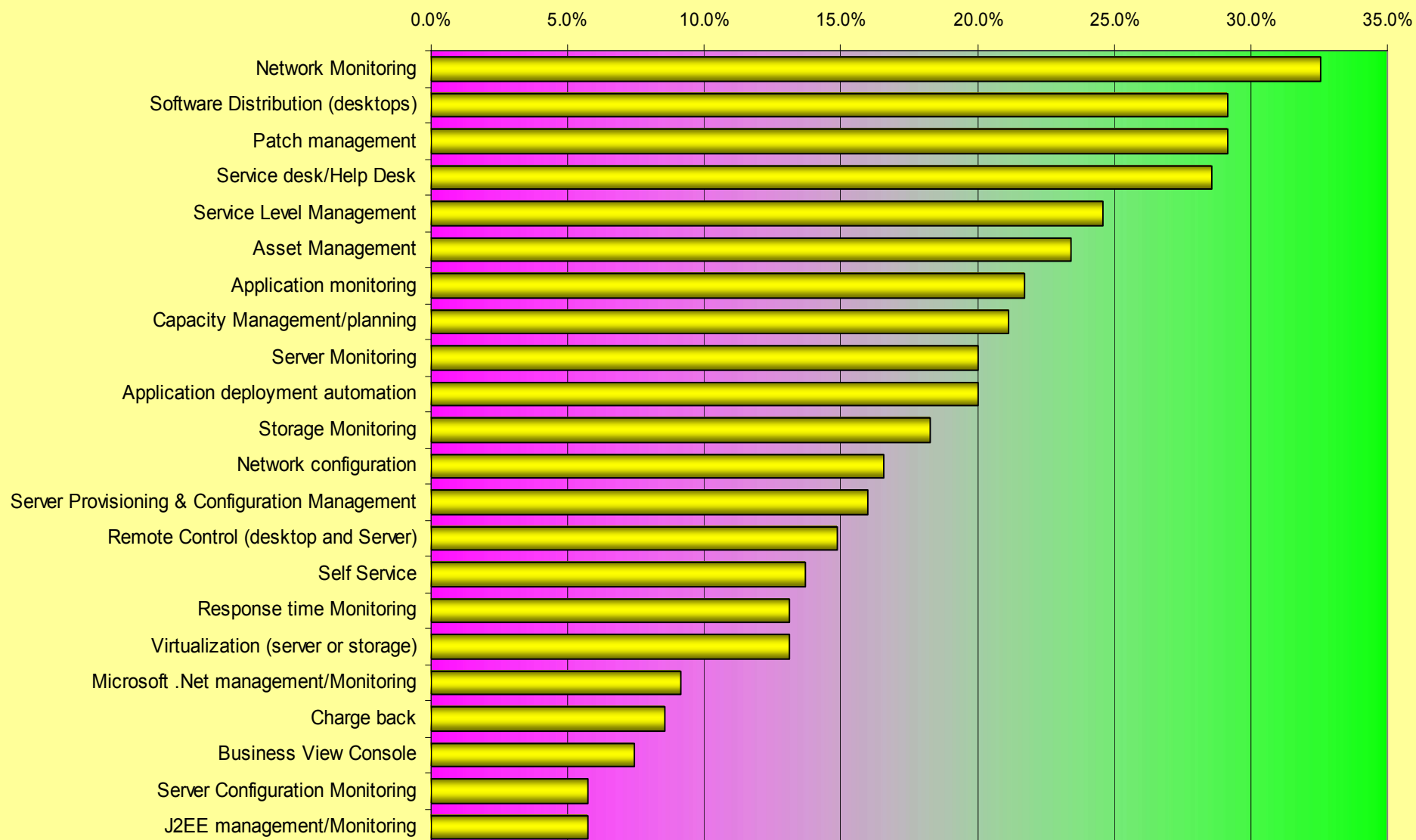Losers

•Maturity •Gap

2003 2004 2005 2006 2007 2008

Assessing the Maturity of Your Monitoring Efforts

- **Are monitoring processes in place?**
- **Do current tool investments map to those processes?**
  - **If so how?**
  - **If not why?**
- **Are there clearly defined and achievable expectations of tools?**
  - **i.e., how does monitoring exhibit business value?**
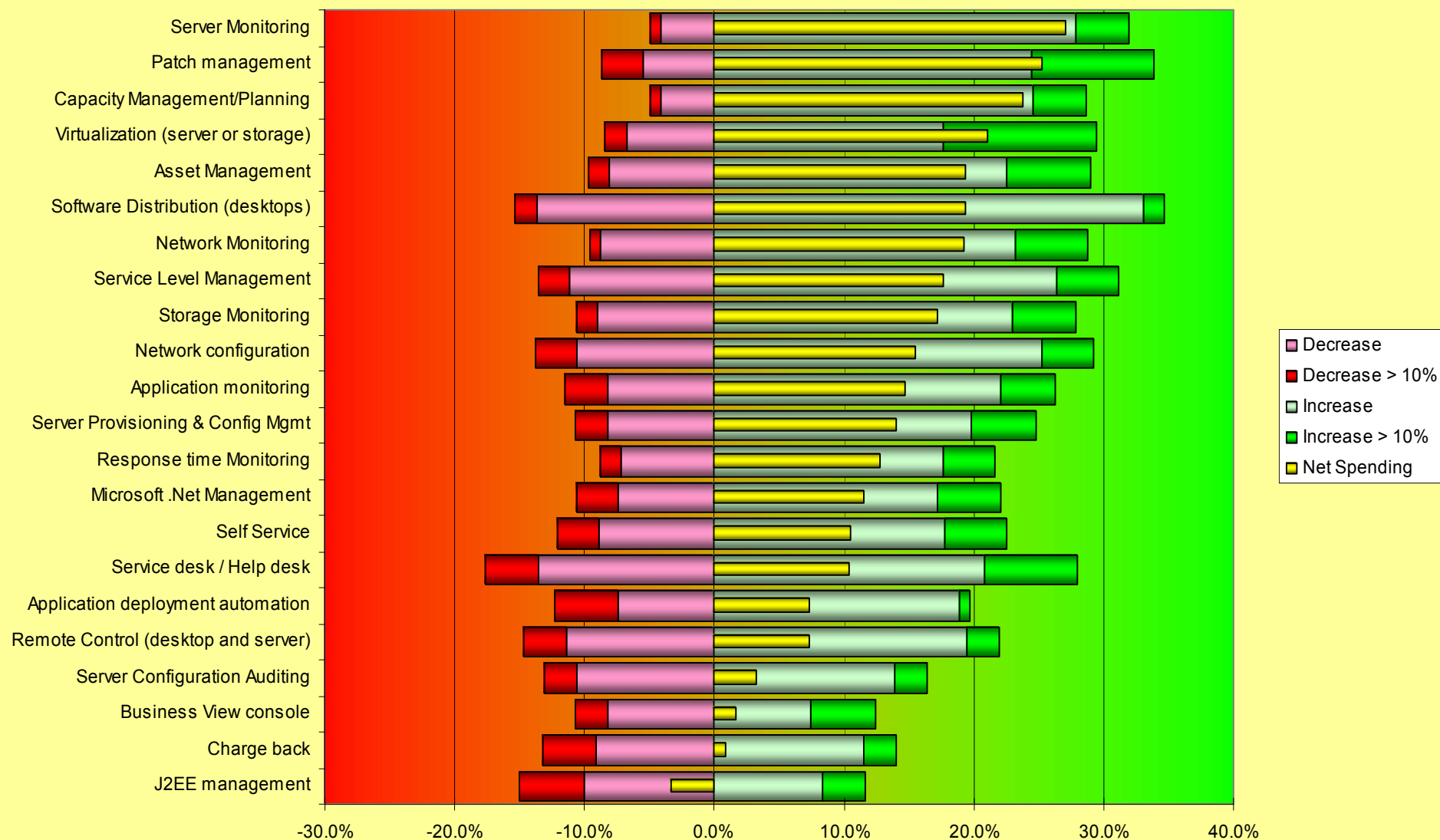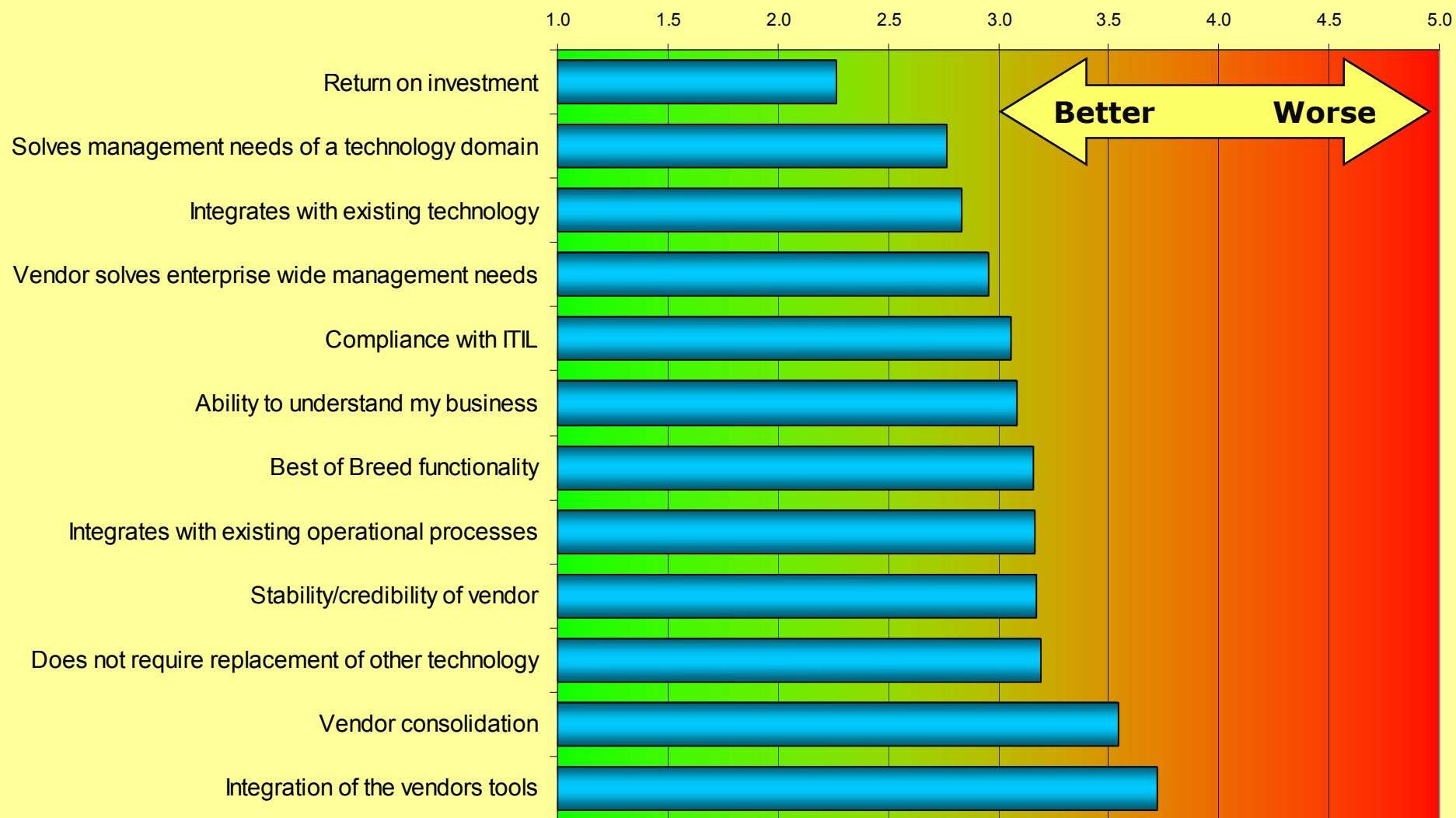- **Are you prepared to deal with change?**

Adaptive

Proactive

Managed

Reactive
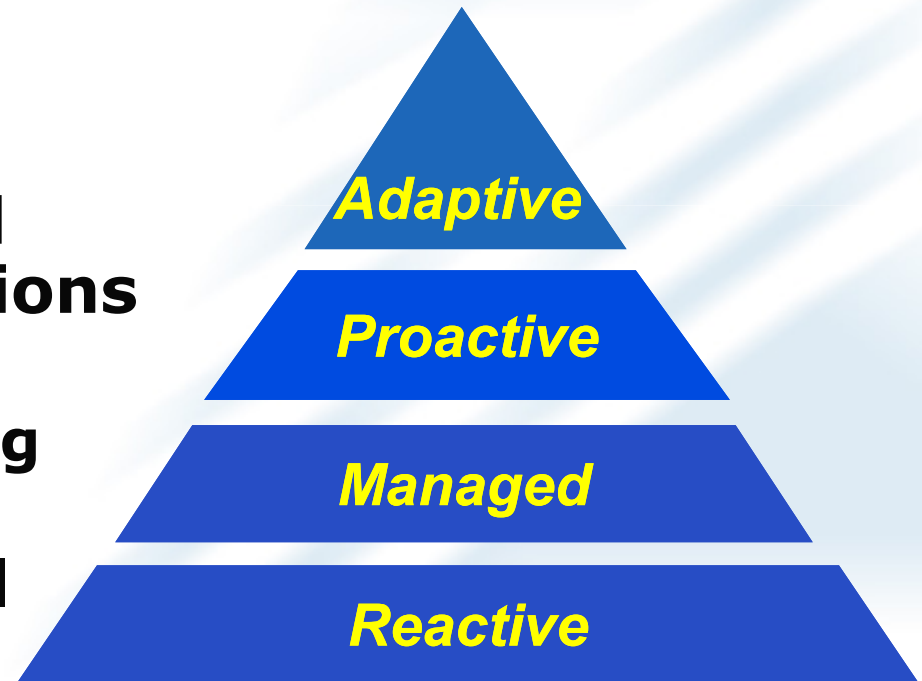
IAM Maturity Model

Operational Tools: 2004 Critical Issues

Operational Tools: 2004 Budget Plans

Operational Tools: 2004 Drivers

	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0

Better ⟷ **Worse**

Return on investment

Solves management needs of a technology domain

Integrates with existing technology

Vendor solves enterprise wide management needs

Compliance with ITIL

Ability to understand my business

Best of Breed functionality

Integrates with existing operational processes

Stability/credibility of vendor

Does not require replacement of other technology

Vendor consolidation

Integration of the vendors tools

What Will 2005 Bring for Users?

- **2005 will be a banner year for configuration and change management**
  - **Now the hottest interest of users**
  - **Driven by compliance, automation, and discipline**
  - **Users want process automation across silos**
- **Continued operational consolidation**
- **A dramatic rise in process adoption**
  - **A few high-profile operational failures in 2005 will compel acceleration of this trend**
  - **ITIL is the foundation, but not the final answer**
- **IT operations are finally growing up**
  - **Monitoring strategies are tracking this maturity**

The State of Management Vendors

- **Many of the large monitoring vendors have technology based on 1990's thinking**
  - ▶ **Newer entrants are changing the playing field by paying more attention to modern business needs**
- **A popular alternative to modernization for vendors is acquisition**
  - ▶ **Smaller vendors get gobbled up to shore up strategic holes**
- **Lots of investments are being made by vendors to create new initiatives**
 - ▶ **Often at the expense of reinvesting development funding in existing tools**

The State of Management Tools

- **For many tools, age is really starting to show**
  - **Everyone can collect and report data**
  - **Few can offer automated analysis and insight**
- **With a new appreciation for the business, ITOs are starting to view tool purchases differently**
- **Emerging technologies have potential to significantly change the IAM tools market**
  - **(e.g. web services, DCML, etc.)**
- **Monitoring ≠ Management**
  - **Management implies more automated action**
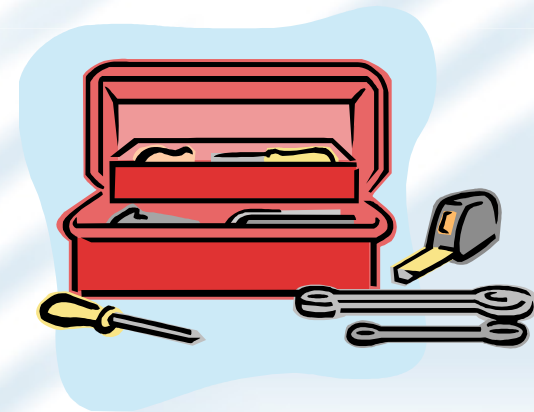
Consolidation in the Management Market

- **Very few green fields left**
  - ▸ **The market for tools is relatively mature**
- **Niche vendors innovate**
  - ▸ **Small, nimble companies exploit new technologies and bring to market faster**
  - ▸ **Large vendors then acquire**
- **Young vendors not looking for market domination**
  - ▸ **Easier to build something cool and sell than compete with the large entrenched vendors**

Appilog → **MERCURY™**

Novadigm → **hp** ← Consera

bmcsoftware ← Marimba
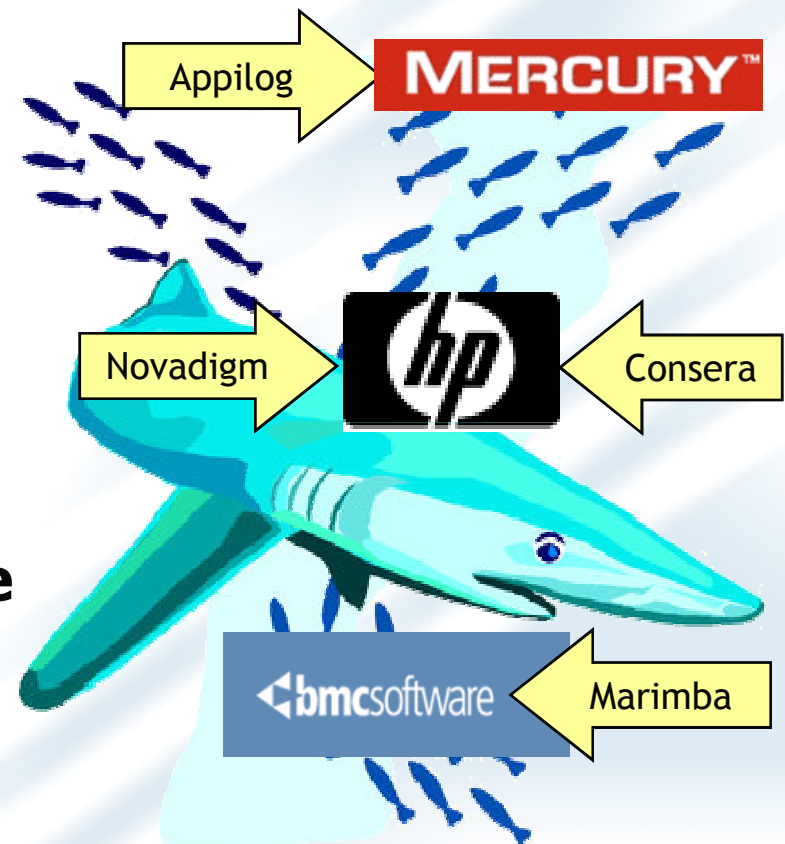
General Observations of Tools in the Monitoring Market

- With mature tools in the typical network, systems, application, and infrastructure space, many vendors are trying to broaden their offerings by retrofitting newer concepts like business views and service level management into their tool sets
- Newer vendors have the advantage of a clean slate upon which to create appropriate architectures from the start
- Larger, more established vendors have a much harder time balancing new features with just maintaining the existing feature set

# *General Observations of Tools in the Monitoring Market (cont.)*

- **A disturbing trend seems to be occurring where ITOs are lowering their expectations and technical requirements in order to minimize the number of vendors they deal with**
  - **This is the incumbent vendor's advantage**
  - **This plays a stifling role for new companies who end up looking to partner rather than compete**
  - **The end result is a small number of larger players exerting more control over tool spending**
    - **Good for the vendor, very BAD for the buyer**
- **Basic infrastructure monitoring is commodity**
  - **Need more analysis and focus on applications**

Expectations of Tools in the Monitoring Market

- **Data becomes a critical differentiator**
  - **People have long collected it, but now the business wants to see it as proof of quality service, so vendors will be pressed to show MEANINGFUL reporting and analysis**
- **Agents or no agents, intelligence becomes king**
  - **Regardless of how data is collected, intelligent, automated, and out of the box analysis of intra-device service metrics is mandatory**
- **Proprietary integration interfaces are obsolete**
  - **Web services provides a standard, easy to use mechanism to integrate disparate products and also removes some level of finger pointing when users ask for new integration capabilities**

Applications: A Proxy for Business Services

- **The application is a tangible IT service**
- **Service management focus is directed at:**
  - **Applications, not infrastructure**
  - **Processes, not technology silos**

- **Application monitoring is pervasive, but weak**
  - **Simple response reporting is no longer sufficient**
  - **Use of real-time deep-dive analytics is growing**
  - **Investigate both active & passive monitoring**
- **Manage applications to management services**
  - **An infrastructure-only focus is too myopic**
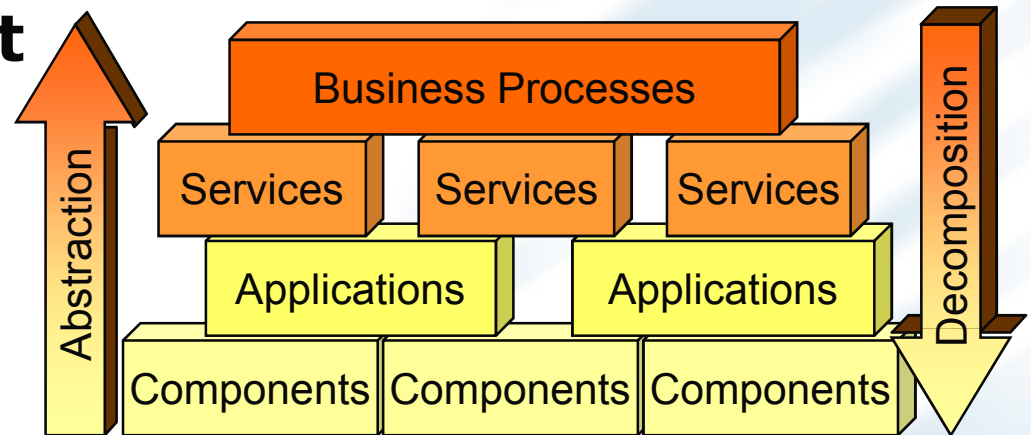
Automated Analysis and Insight

- **Simple reporting is ubiquitous, but inadequate**
- **Advanced mathematical methods are starting to improve real-time analysis of performance data**
  - **Watch for more breakthroughs from scientific research**
- **Use dynamic thresholds, not just static thresholds**
  - **Anomalies are suitable triggers for adaptive change**
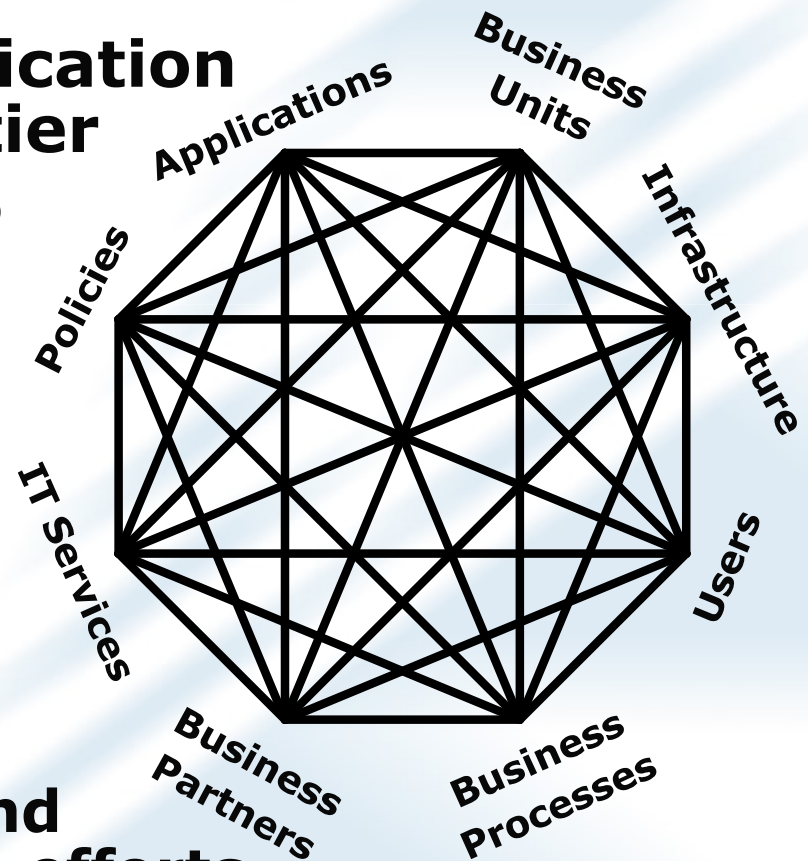- **Map relationships for multivariate analysis**

Static vs Dynamic Thresholds

Alarms?

Static Thresholds

Anomalies!

Statistical Baselines
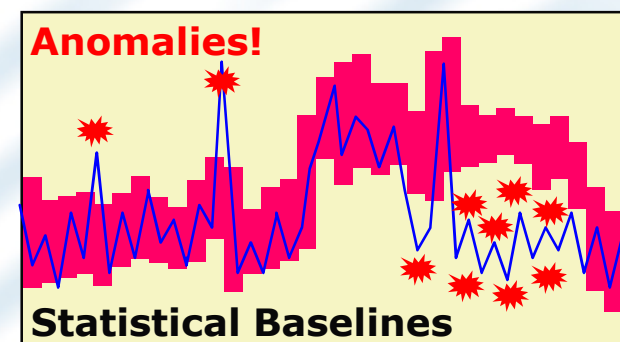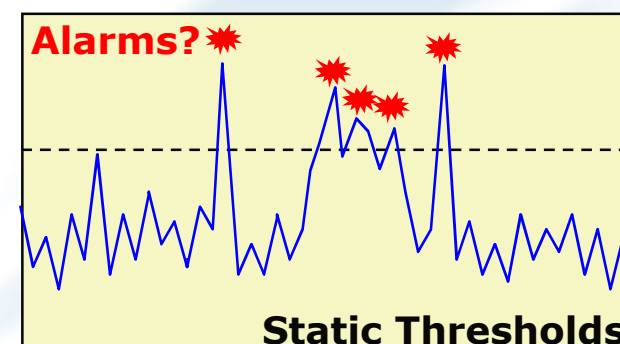
The Technology Relationship Map: The Secret to Management Bliss

- **Collections of objects have limited value without relationships**
- **Discovery of internal application structure is the next frontier**
  - **Still evolving but ready to provide analytical value**
  - **Discovers an important "missing link" for automated analysis**
- **Mapping software and hardware components exposes behavior for deeper analysis**
  - **Streamlines root-cause and performance optimization efforts**

Applications • Business Units • Infrastructure • Users • Business Processes • Business Partners • IT Services • Policies

Monitoring Market Summary

- **Users and tools are maturing, but both sides are encumbered by their legacies**
- **Monitoring is becoming more process-focused**
- **Vendor consolidation is in full stride, but expect new vendors to emerge and innovate**
- **Near-term developments will highlight enhanced real-time statistical data analysis**
- **Future tools will leverage relationships for multivariate analysis of business services**

"In the struggle for survival, the fittest win out at the expense of their rivals because they succeed in adapting themselves best to their environment."

- Charles Darwin -