IBM Global Services
October 2003

IRM – What have we learned and where is it going?

Author:
William McNichols
Sr. Infrastructure Systems Management Consultant
IBM Global Services

Contributor:
Bill D. Powell
IT Consultant
IBM Global Services

Contents

Introduction

In the last three to four years, organizations have witnessed the evolution of what used to be basic, standalone inventory management techniques and tools into a complex and wide-ranging management system for enterprise IT asset management and control. Managing the procurement, configuration, deployment, and financial information related to the organization's IT assets required a holistic approach which has come to be known as Infrastructure Resource Management (IRM).

The evolution is far from over. On demand computing will require even tighter, real-time control over the automated provisioning of assets in order to empower its employees and enable its business partners. These new tools and processes will drive an even higher level of productivity and represent as great a step forward as we have witnessed in the recent evolution of IRM. Demand driven IT Management relies on a strong foundation in effective enterprises systems management, so now is a good time to review what we have learned - where risks still exist and what benefits have been realized. Organizations that have yet to implement an IRM solution should look for business justifications in the benefits achieved in some of these cases and gain an appreciation for the requirements (and pitfalls) of the enterprise-wide change required to achieve these benefits.

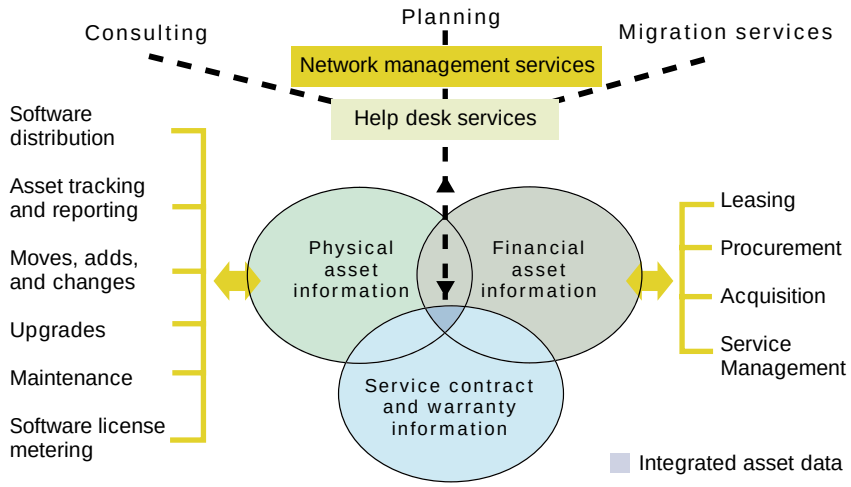
Definition

For our purposes, IRM can be described as a management practice, supported by software and processes. IRM is a multidisciplinary and strategic approach to managing IT assets throughout a defined lifecycle from procurement through disposition. See figure 1.

To deliver integrated computing services, processes such as Asset Management, Change Management, Configuration Management, Procurement Management, and Problem Management must be effectively integrated. The integration occurs primarily through the sharing of data about each asset or configuration item in a common repository. Throughout the life of an asset, financial information (cost, lease terms, vendor, value, etc.) can be collected and maintained. Assets can be tracked and managed from a financial standpoint.

Highlights

Fig. 1: Integrated infrastructure resource management
Core value proposition: Asset/infrastructure knowledge



Some of the same basic information can be enhanced with information for maintenance, deployment all throughout the life of the asset. This service and warranty information is useful for managing the physical condition of the asset.

Finally, up-to-date configuration status information can be maintained including hardware and software configurations, upgrades, locations, and other information useful for Help Desk, Install Move Add Change (IMAC) and Change Management.

The goal is to build and maintain a repository of useful information about all assets that can be used to effectively manage those assets in different ways, and to make that information available to other key business and management processes. In this way, configuration and warranty information can, for example, be made available to the incident management process, enabling an effective Service Desk and efficient dispatch activity. Sharing the data improves the efficiency and effectiveness of all the processes necessary for IT service support and delivery.

Sharing the data improves the efficiency and effectiveness of all the processes necessary for IT service support and delivery.

Highlights

Best Practices

Gartner Group, through its study of Asset Management Best Practices says that, "IT asset management is 80 process and 20 percent tools and that …

> *…IT asset management is more than a tool, and it is also more than integrating tools and counting "things." IT asset management is the cohesive merging of the physical, financial and contractual attributes of an asset to enable the delivery of cost-efficient, timely business solutions. IT asset management spans the life cycle of an asset and thus has various life cycle interdependencies and information flows by and between multiple business areas."* [1]

While software is required, software vendors agree that the key to Asset Management system success is in the process.

> *"Asset Management is an enterprise-wide strategic initiative. In order for a company to fully benefit from this process, it must involve all organizational levels. It is an ongoing, intensive process that when planned strategically, helps organizations realize an immediate return on their investment."* [2]

It is an ongoing, intensive process that when planned strategically, helps organizations realize an immediate return on their investment.

Consistent with this message, the following best practices should be employed to help ensure success of an IRM deployment project.

- *Defining and adhering to standards to reduce and/or contain costs.*
- *Creating and communicating new policies to establish guidelines for end-user conduct, changes in company culture, and responsibility and accountability within the enterprise.*
- *Implementing the supporting processes to manage and maintain an integrated data repository of all asset information.*
- *Creating an internal marketing plan to help end users understand and buy into the asset management program.*
- *Assigning ownership of the underlying process to a single manager for consistency.*

Highlights

Asset management processes, procurement processes and other key business processes need to be reengineered and reintegrated around the needs of the business and the capability of the software. The software tool should reflect the goals of the business and management processes, but this requires planning, focused teams and usually some level of consulting support.

Software tool selection should be a structured effort, following an adequate requirements definition. It is important to establish clear, prioritized criteria that will serve as a guide in selecting an asset management related tool. Best practices indicate the need for three tools[3]:

There are three distinct tools: auto discovery, repository, and usage

1) auto discovery
2) repository
3) usage

We recommend the following tool evaluation criteria:

- *Functionality – the functional attributes of the tool.*
- *Architecture – aspects of the infrastructure required to run the tool and how well it fits the organization's environment.*
- *Cost – both the initial cost (including customization, installation, and training) and ongoing costs such as maintenance and upgrades.*
- *Service and support – support and professional services such as consulting.*
- *Viability – how likely it is that the tool vendor will continue in the market.*
- *Vision – the tool vendor's plans for development and how well they mesh with current organizational asset tracking/management plans.*
- *Alignment with established tool strategy and architecture – does the tool support the existing strategy (tool suite, best-of-breed, point solution) as well as the established architecture standards?*

Highlights

The key constituents of these benefits are the CFO, the CIO, Service Desk Management, and IT Operations / Network Management.

Benefits

IRM creates organizational benefits across a wide spectrum. The key constituents of these benefits are 1) the CFO, 2) the CIO, 3) Service Desk Management, and 4) IT Operations / Network Management.

1. The CFO wants tracking reports, optimized asset usage, simplified procurement, and license, lease and contract management.

2. The CIO wants
- *Insight into cost of ownership*
- *Reduced support costs*
- *Accurate software licensing*
- *Reduced "lost" assets*
- *More accurate pricing of services via better data*
- *To identify problem assets*
- *To identify problem service providers*
- *To run a better and more efficient business*

3. The Service Desk team needs
- *Location information*
- *Configuration Information*
- *Incident History*
- *Repair / Warranty status*
- *Owner Service Level Agreement (SLA)*
- *Known Errors*
- *Change History*

4. IT / Network Operations needs
- *Accurate location information*
- *Insight into change history*
- *Better up-front data*
- *Standards purchasing*
- *Software license management*

Highlights

Service Offerings

IBM offers a variety of Infrastructure Resource Management Services from assessment and consulting to rapid deployment of solutions onsite or as managed services. We have developed tools and methods – such as the IRM Accelerator – to quickly implement best practices processes which include both ITIL and IBM IT Process Models. The service deployment can be hosted offsite or in-house, offering the widest array of solution options.

One global company estimated savings of tens of millions just by using IBM's procurement services.

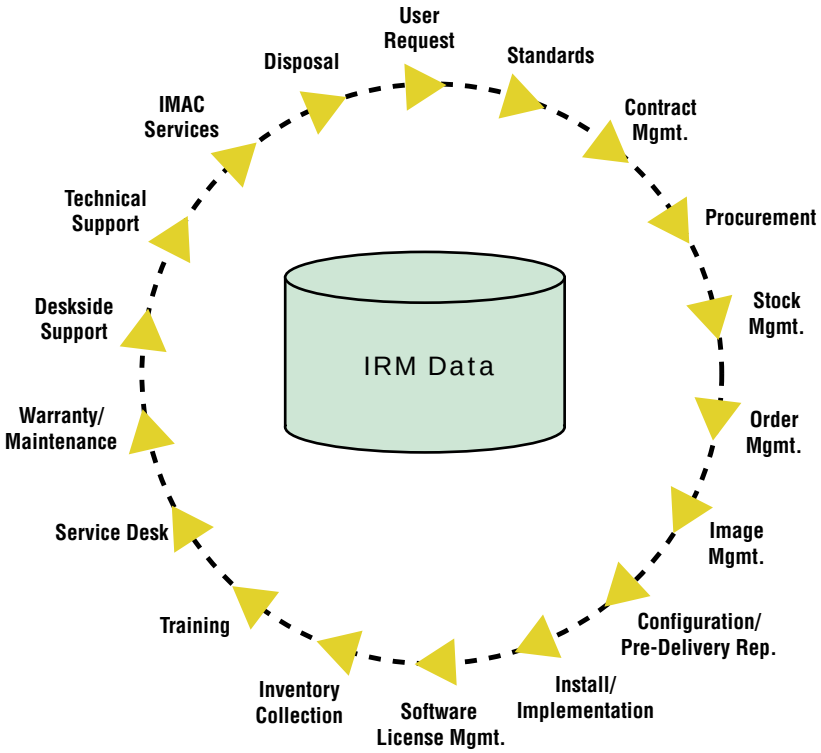
Procurement services can be built internally or "snapped-in" using IBM's global procurement offerings. One global company estimated savings of tens of millions just by using IBM's procurement services. Procurement portals that allow for self-service provisioning for employees and other partners can be built to integrate effectively with asset software, enabling process integration. Employees can order supplies through an approved process and the assets can be delivered, deployed, charged back to the original department, configured and made productive in a single integrated process. The data generated from these processes can be made available to all other processes like lease and contract maintenance, and software provisioning and management.

Desktop management deployment and services can also be an internal process or out-tasked to a provider in an integrated IRM environment. Open standards-based systems and well-defined processes are the key enablers for such services.

This is extremely important as on demand businesses adopt a service-based orientation. Specific services, such as Web portal-based procurement, must be integrated with the rest of the elements in the IRM value chain, such as asset management software and monitoring tools. Since no one tool can completely fulfill the IRM requirements, open standards-based tools must be linked seamlessly. In the on demand business environment, infrastructure must enable, not impede.

Highlights

Fig. 2: IRM Touchpoints



Why should businesses adopt IRM?

There are many areas of benefit to organizations, some of which are available in the tools. Implementing "point" solutions can produce some benefits, and indeed, to achieve those benefits, integration may not always be necessary. A look at these benefits in the context of IRM is revealing.

IRM data is the key integrator.

IRM data is the key integrator. For an example, an inventory tracking solution can yield benefits to the IT operation by making data available about the desktops. Likewise a software discovery tool can determine the number of copies of licensed software. A procurement portal can provide information about purchases. But what if the data was shared so that each system contributed to a composite view of the assets that could be used at the Service Desk to understand the configuration details of the problem device, in the purchasing office to regulate the number of licenses purchased, in the CIO's office to understand the Total Cost of Ownership (TCO)? This is the power that comes from integration of the solutions.

Highlights

Businesses that don't adopt IRM are at a competitive disadvantage.

What if we don't adopt IRM?

Businesses that don't adopt IRM are at a competitive disadvantage today and will not be positioned to take advantage of the products and services that are being developed to improve IRM. For example, the on demand business environment is moving to employee self-service provisioning for access to systems and procurement of assets. These processes must be developed so that the approval and other business policies can be automated within the software. Organizations that delay are losing ground to nimbler competitors that can give their employees and external partners quicker access (minutes instead of days or weeks) to vital business systems and other tools. Speed to deployment of knowledge workers is a quantifiable productivity measurement. These process changes take time to plan and develop, even with the use of best practices templates.

Likewise, the more resources spent managing internal processes like procurement and asset management without today's tools, the less management can focus on real business issues. Organizations that cannot transform, simplify, and/or out-task their non-core processes will lose ground to those that can. Internally, their lack of efficiency will not only slow them down, but also continue to waste real dollars on inefficient and disintegrated business processes.

Gartner estimates that enterprises that begin an asset management program experience up to a 30 percent reduction in cost per asset in the first year- including people, process, and technology costs- and continued savings of 5 to 10 percent annually over the next five years. Savings can be found by recovering assets rather than having to buy new ones, and eliminating unused assets that have costs involved (such as maintenance costs for unused equipment). However, this has to be put up against a cost of up to 1 percent of a company's budget per year to update the information.[4]

Highlights

Meta Group predicts real dollar savings.

What does it cost not to implement IRM? Opportunity costs aside, there are real dollar savings predicted by Meta Group with many of the integrated elements of IRM.

1. **Reduced Help Desk Costs.** A technician's immediate knowledge of the configuration and location of a desktop could reduce diagnosis and response time and an accurate inventory could help drive better negotiation of costs, ranging from $35-$100 per desktop. [5]

2. **Optimized Software Deployment**. Automating an application rollout to 3,000 users by electronic software distribution (ESD) could easily save 2,000 hours of technician and end-user support costs, representing a potential $100,000 in annual savings.

3. **Cost-Effective Purchasing Strategies.** Simply stated, centralized purchasing with accurate information and provide reductions in acquisition cost of 3-5%. [6]

4. **Maintenance Contracts.** By having accurate information about the types of machines deployed in the enterprise and the types of users, organizations can negotiate differentiated service levels (i.e., pay less for workstations that do not change or are only used for office tasks) with external service providers (ESP's).

Highlights

Additional savings typically accrue in various categories.

Additional savings typically accrue in some or all of the following categories.

- *Volume Purchase Agreement*
- *Reduced Inventory*
- *Automatic Software/Hardware Discovery*
- *Surplus Discovery*
- *Theft/Loss Recovery*
- *Managing MACs and Installations*
- *Software License Compliance*
- *License Reuse*
- *Asset Retirement*
- *Problem Management process improvement and higher availability*
- *Call Volume Reduction*
- *Reactive Dispatching Costs*
- *Complexity Reduction*
- *Maintenance Contracts*
- *Property Tax Reduction*

Highlights

While these savings and efficiencies are relative to the organization's size and maturity, they are important improvements that are more likely to be achieved in an integrated IRM. Real life examples include some of the following: [7]

- *A bank saved $2 million in the first year through invoice verification on assets purchased*
- *A telecommunications company saved $600,000 in the first year by canceling duplicate software licenses*
- *A tobacco company saved over $600,000 in lease and invoice errors in the first year*
- *A bank saved $250,000 by canceling maintenance agreements on little-used software*
- *A pharmaceutical company saved $9 million in 18 months after implementing a purchasing information exchange*

Beyond the savings, the on demand organization of the future will need an infrastructure platform that is both more reliable and flexible.

As to opportunity costs, analysts agree that current savings have been achieved and can continue to be achieved. However, beyond the savings, the on demand organization of the future will need an infrastructure platform that is both more reliable and flexible.

"We believe the key to improvement of these [asset management] programs will lay in the ability to articulate and show value beyond initial savings, illustrated by improved service and lower cost to ITO customers."[8]

Highlights

Implementing IRM

Organizations that have not embraced the message of IRM should begin to take steps to understand the value proposition for their organization based on the experiences to date.

- *Appoint an executive sponsor. On demand infrastructure should span the entire organization to achieve true integration benefits. A ranking executive can help cut through the organizational politics.*
- *Hire an integration expert. The task of integrating many systems effectively can be complex.*
- *Form a team of all constituents. Optimum value comes from addressing financial as well as operational, IT and Service Desk personnel.*
- *Don't start with tool selection. Tools should be selected only after the requirements have been understood and defined.*
- *Focus on process. A service-based infrastructure relies on well-defined processes, especially change management. The data should be kept up to date in an integrated IRM database, and once the data comes in, it relies on formal change processes that include updating this information.*
- *Demand open standards. The solutions of the future will be more highly integrated sets of packaged services (software delivery, metering, hardware monitoring, Web purchasing, etc.) and companies will want to integrate the best service or service provider without disrupting the integration in place.*

Organizations can avoid the risk and capitalize on the opportunity to achieve cost savings and efficiencies.

Following these guidelines, organizations can avoid the risk and capitalize on the opportunity to achieve cost savings and efficiencies, while providing greater services to their end users and preparing for a future where the IRM will be highly autonomic and adaptable.

Highlights

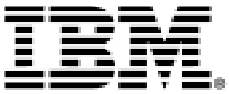
IBM can help you optimize the return from your IRM investments.

Summary

IBM Global Services provides industry-leading consultative and implementation capabilities for infrastructure resource management. By intelligently leveraging industry best practices and industry-leading software, we can help you optimize the return from your IRM investments.

For more information

For more information, please visit: ibm.com /services /ism/irm



IBM Global Services
Route 100
Somers, NY 10589
U.S.A.

Produced in the United States of America
10-03

1. O'Brien, Frances, "IT Asset Management Conference Q&A: Best Practices" Gartner Group, July 5, 2002
2. Peregrine Systems Market White Paper "Best Practices in Asset Management", March 2001
3. Adams, Patricia, "Three Tools of an IT Asset Management Program" Gartner Group, October 15, 2001
4. Fisher, Sharon, "Asset Management: An Introduction", Gartner Research, May 16, 2001.
5. Snyder, William, "Tactical Asset Management Return on Investment", Meta Group, 2/18/2003 as reprinted on Remedy Corp. Web site
6. ibid
7. Shoup, Larry. IT Asset Management: The Big Picture, Janus Technologies, Inc., 1999
8. Snyder, B., "The Hidden ROI of Asset Management", Meta Group,11/26/01

G510-3679-00