



IT Asset Management for Better Visibility, Control and Compliance



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INTRODUCTION

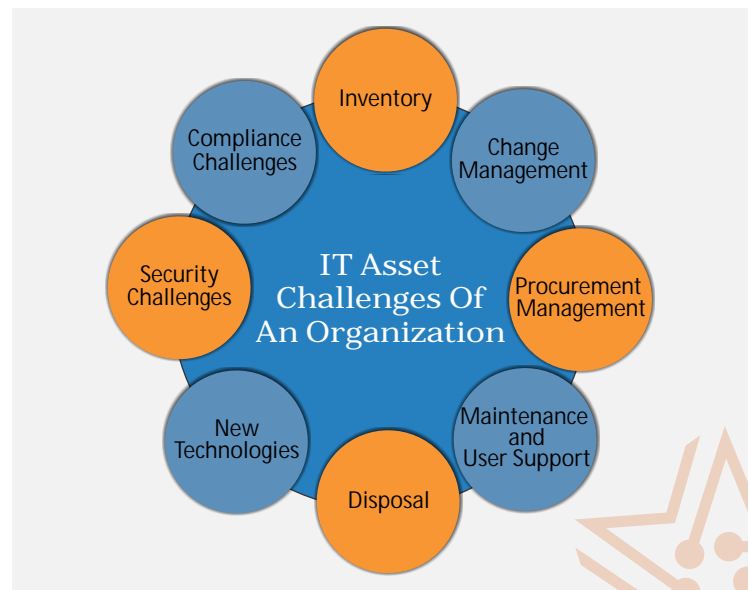
The IT infrastructure within an organization comprises the hardware, software, network backbone and all the services the organization requires for its continued effective and profitable business operations. Today customers are digitally empowered and therefore, every business has become a digital business. This has made the IT infrastructure within the organization extremely complex with the introduction of technologies like the Cloud, Enterprise Mobility, BYOD, and Virtualization.

Organizations need to heavily leverage this complex technology to ensure smooth business operations. This increased complexity combined with the increasing dependence of organizations on their IT Infrastructure has thrown up several challenges for the CIO's of organizations. One challenge is that the greater the number and variety of devices, the harder it becomes to maintain, manage, and monitor these end points. CIO's also have the challenge of keeping track of the infrastructure that is deployed around the organization including the specific life cycle stage of each IT asset. A third major challenge is ensuring organization-wide compliance with all IT and security policies in such a complex environment.

This Whitepaper will briefly introduce the subject of IT Asset Management (ITAM) and focus on how ITAM can help organizations achieve more transparent visibility of all the IT Assets under their control, better control of these assets across their entire lifecycle and ensure easier and more complete compliance management.

IT ASSETS - CHALLENGES

Several different elements make up the IT infrastructure of an organization – the PCs, Laptops and individual use devices, servers, networking equipment, printers, scanners and even communications equipment like phones, consumables like printer ink or toner and finally all the software that runs on all this equipment. The IT Department under the CIO has the task of planning for the IT needs of the organization, procuring and provisioning all the required IT assets, monitoring and maintaining these assets over their entire life cycle and finally planning for their obsolescence and disposal at the end of the functional life of the asset. The scale and complexity of the assets present several challenges for the CIO and the IT Department



1. **Inventory:** It is a challenging task creating and managing an updated inventory of all the assets in use across the organization. An accurate inventory list including all relevant information like make, identifying number, the physical location of deployment and specifications is crucial for planning as well as management.
2. **Change Management:** Change is a given in the context of IT equipment as new technology comes in to replace older methods and as operating systems, software platforms, standards and protocols continuously evolve. The challenging task of the IT Department is to keep track of the changing IT ecosystem and ensure that the IT assets are updated and able to consistently keep working with each other.

3. **Procurement Management:** IT assets have to be provisioned – managing their procurements is a complex task involving ensuring the right equipment is procured at the best price and only when it is needed. There is also the issue of defining and adhering to the capital and operating budgets.
4. **Maintenance and User Support:** The IT assets need to be serviced regularly to ensure continued operation at the required performance level. This is not easy given the variety and scale of IT assets in most organizations. This task is further complicated since most of these assets are under the active use of people in the organization who expect these activities to be undertaken without impacting their work.
5. **Disposal:** When an IT asset reaches the end of its productive life it has to be disposed of in the manner prescribed by the prevailing environmental and safety norms. The challenge for the IT Department is identifying the right moment for decommissioning the asset and then finding a safe, effective and economic method for disposal.
6. **New Technologies:** There is growing adoption of technologies like the Public Cloud among organizations. In parallel individuals are using their personal devices like smartphones and tablets more at the workplace and organizations have responded with BYOD policies to govern their usage. This presents a difficult problem to the IT Department around defining asset ownership and boundaries. For example how to categorize the ownership of the IT assets used for securing backed up data at a Cloud data center or how to account for the licenses of an office productivity tool installed on the personal mobile device of an employee?
7. **Security Challenges:** IT assets are spread out over the organization and in most cases have access to, and can be accessed by, outside networks including WANs, VPNs, Cloud networks and the internet. This presents the risk of malicious or accidental intrusion that the IT Department has to guard against. Inadequate protection from such security risks can cause theft, loss or corruption of important business data, loss of business and reputation and disruption in normal business operations.

3 crucial business areas impacted by not addressing IT Asset Challenges

- 1.) VISIBILITY
- 2.) CONTROL
- 3.) COMPLIANCE

8. Compliance Challenges: Businesses today face an enormous compliance burden. Legally mandated as well as internal policies that need to be strictly complied with place the IT Department's resources under tremendous strain. The challenge is greater because the legal requirements change frequently. Organizations spread across multiple locations and countries have an even greater challenge due to the different rules that apply at different places.

BUSINESS IMPACT OF INADEQUATELY ADDRESSING THESE CHALLENGES

The IT Department is under pressure to put into place an effective strategy to manage the IT Assets under its care that is sustainable in the long term. The risk of a poor, incomplete or ineffective strategy or execution is an impact on the business. For purposes of this whitepaper, we will focus on the impact in three crucial business areas.

Visibility

Unclear visibility of the number, usability, capacity and capability of the various IT assets of the organization impacts the business in a number of ways.

1. Organizations are heavily dependent on their IT infrastructure for continued business operations. Not knowing exactly what state this infrastructure is in or what it is capable of presents a risk of business disruption as the infrastructure capabilities may not be at the level the business requires. There is potential for failure when the infrastructure is stressed.
2. Business planning can potentially be impacted since plans may be based on out-of-date or inaccurate assessments of the capacity and capability of the IT assets available within the organization.
3. Poor inventory management of the IT assets in an organization carries with it the risk of under-provisioning at one end and under-utilisation at the other. In the first case, the IT assets and the infrastructure will be inadequate for the number of business users and the business needs. In the second case, more equipment than is required is provisioned and this results in it not being leveraged to the maximum capacity.

4. Good procurement decisions that optimally leverage the available budgets are predicated on a clear understanding of the current state of the IT asset landscape. An unclear understanding will lead to poor procurement decisions and improper utilization of the resources.

Control

Taking control of the IT assets in the organization is a key charter of the IT Department. There is a significant downside to a loss of control and potential gains to the business from an enhanced control of the IT assets.

1. Ownership of each specific IT asset has to be clearly defined. With defined ownership will come the capacity of taking responsibility for the maintenance and performance of the asset at the level required for optimal business operations.
2. Unified control is imperative within the organization to ensure seamless connectivity and a unified, integrated environment across the various IT assets in the organization. Loss of control can lead to a situation where integration and inter-operability issues hamper the overall effectiveness of the organization by creating inefficiencies and also increased points of failure. On the other hand, a greater degree of control will ensure a more cohesive IT environment that can operate at elevated performance levels.
3. Management of the IT assets is resource intensive. There is a cost in terms of money as well as the management bandwidth of the IT Department. Reduced control of the overall IT asset landscape leads to more divergence from the norm and greater device and system variety which in turn will bring with it increased complexity of management and a greater cost to the organization.
4. The organization can gain from greater standardization that will result from unified control. Synergies can be identified and exploited among the IT assets, for eg. spares can be provisioned more efficiently and economically across similar equipment and equipment classes.

Compliance

The compliance demands on organizations today are onerous. There are specific compliances related to business activities where the role of the IT Department is to store, maintain and present the data needed for validation. There are also specific IT related compliances that are the direct responsibility of the IT Department.

1. Several IT compliances and policies relate to security. Non-compliance can compromise the integrity of the IT environment, the data contained therein and also the business operations that are delivered over it.
2. Non-compliance with statutory laws or even the inability to, on-demand, prove compliance with statutory rules and regulations carries with it the threat of fines, penalties and in extreme cases even penal action.
3. The IT Department also has the Compliance related task of ensuring that only duly licensed software is put to use across all the IT assets in the organization. Using un-licensed software is a security risk but also exposes the organization to legal repercussions including potential fines and penalties.
4. Audits of the IT infrastructure and especially of the software assets is a resource intensive activity but is mandatory given the prevailing regulatory climate. An overly complex or poorly documented asset environment increases the effort involved in such an audit and hence the cost.

OVERVIEW OF IT ASSET MANAGEMENT

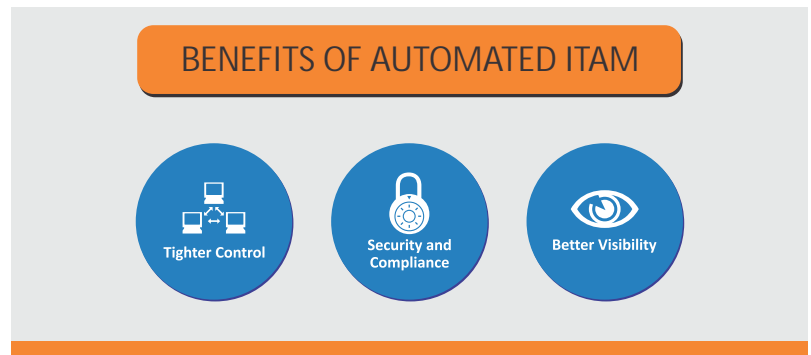
Gartner in its IT Glossary says, "IT asset management (ITAM) entails collecting inventory, financial and contractual data to manage the IT asset throughout its life cycle. ITAM depends on robust processes, with tools to automate manual processes. Capturing and integrating autodiscovery/inventory, financial and contractual data in a central repository for all IT assets enables the functions to effectively manage vendors and a software and hardware asset portfolio from requisition through retirement, thus monitoring the asset's performance throughout its life cycle."⁽¹⁾

Gartner's definition puts the focus on the contracts that govern the procurement, management and disposal of the IT assets and highlights associated issues like vendor management and management of financial data. While this focus on governance is a valid part of the scope of the IT Department there have been attempts to define IT Asset Management in terms more closely associated with the objectives of the business. The TechTarget Essential Guide, for instance, says, "IT asset management (information technology asset management) is a set of business practices for optimizing spending and supporting strategic decision making within the IT environment while also increasing the company-wide understanding of IT's business value."⁽²⁾

Taken together these definitions show that IT Asset Management addresses all the functional areas within the organization that is related in any way to the IT Infrastructure and T Assets. The essential function is to track each IT Asset from the time it is procured to the time it is disposed of at its EOL. By addressing all these functions through a single overarching ITAM strategy the management of the IT Assets across the entire lifecycle becomes both more effective and more cohesive. A unified strategy allows organizations to gain more transparent visibility into their IT Assets – what assets do they own, where are they being used, how much are they utilized and what impact do they have on the business processes they are designed to serve. This greater visibility drives much tighter control for the IT Department over the assets under their care and what happens to them. A functional ITAM strategy also helps the IT Department address the audit, documentation, security and compliance related tasks that also come under their charter.

The key value to the organization accrues when the manual processes within the ambit of ITAM get automated. This has been explained well by Patricia Adams, research director at Gartner, "ITAM depends on robust processes, with tools to automate manual processes. This data then enables organizations to effectively manage IT assets, vendors and a software and hardware asset portfolio from requisition through retirement, thus monitoring the asset's performance throughout its life cycle."⁽³⁾

BENEFITS OF AUTOMATED ITAM



Powerful and feature-rich IT Asset Management Solutions help organizations gain better control over the various components within their IT architectures and derive greater value from their IT investments. Some of the key benefits of Automated Asset Management Solutions are:

Better Visibility

Automated IT Asset Management can help the IT Department get better visibility on the hardware and software assets currently in play and then help them make more accurate projections on the IT assets needed to meet the needs of the business. This can help the organizations in coming up with a more accurate budget and hence in substantially reducing the overall costs and offering tighter financial control.

With a clear understanding of the requirements, organizations don't need to purchase licenses which are not needed. The clearly defined needs can help in procuring the software at a more competitive price. Through better visibility comes proper streamlining of the processes for downtime or compliance, reducing the risk of business disruptions as the problems are anticipated and taken care of even before they arise.

Tighter Control

Automated IT Asset Management allows better tracking of the IT assets deployed with the organization. A specific area of focus is software installation in the organization network. Tighter control results from better tracking. This helps in prevention of download and installation of unlicensed, illegal unauthorized or incompatible software on the company's computers. It also saves the machines from the accidental downloads of viruses.

Because of a tighter control on what gets installed on each machine, there are fewer support issues which typically arise because of unauthorized software installations. There are also reduced risks of incompatibility causing system or network performance issues. All this can help the organizations in reducing or better directing the efforts of IT support team and saving costs.

Security and Compliance

With Automated IT Asset Management, compliance issues like software upgrades, renewals, and equipment warranties are taken care of more easily thus reducing the burden on the IT staff. The software can also easily generate reports on IT inventory which are required for compliance auditing, thereby saving a lot of time for the IT staff who would have otherwise spent time in creating the reports manually.

Automated IT Asset Management also helps the IT Department ensure that no one in the organization acquires any illegal licenses thus reducing the risk of fine and penalties and reducing the security risk. As Dr. Barbara Rembiesa, CEO of the International Association of Information Technology Asset Managers has very rightly said, "If companies are to stop attacks in 2015, they must first recognize that the true source of nearly all major breaches are more foundational and stem from non-existent or inadequate IT asset management procedures."⁽⁴⁾

OVERVIEW OF ISO 19770⁽⁵⁾

The International Standards Organization (ISO) has defined a range of standards covering most of the areas of direct concern in ITAM. These address the process requirements as well as the technology needs for ITAM, especially Software Asset Management (SAM). The standards are integrated into the Management System Standards. The standards are intended to help organizations seeking to implement and operate an IT Asset Management or a software asset management system using both process and technology. There are 4 parts to ISO 19770 at this time:

19770 – 1 – this standard refers to the ITAM best practices within the organization including defining a maturity matrix. There are specific definitions that allow the IT Department to satisfy questions about the corporate and IT governance standards being achieved.

19770 – 2 – these standards related to Software Identification (SWID) tags. They define how software assets could be tagged for identification of installed software or any other licensed item.

19770- 2 – these standards, still under development, define a schema for machine encapsulation of the rights and entitlements of software licenses.

19770 – 4 – these standards specifically relate to how the utilization of the IT assets under the care of the IT Department is reported.

These standards help organizations to understand the industry standard IT Asset Management best practices and in line with those best practices to gather and manage the data that is required to make their IT Asset Management strategy effective.

ALCOR'S IT ASSET MANAGEMENT CAPABILITIES

Alcor is a global cloud advisory and implementation services company serving Government establishments, Fortune 500 and other leading organizations in multiple industry verticals. We advise leading businesses on cloud platforms, architecture, enterprise service management and integrating IT service delivery. We provide focused and specialized skills to address the technology needs of our clients in the ITSM, IT Asset Management, systems integration, web development and mobility space. We have deep expertise in providing solutions to our client organizations.

In IT Asset Management our competence extends right from process consulting and through to lifecycle management. Our IT Asset Management practice covers the entire cycle:

- ▶ Plan – producing the asset management plan and defining the asset model structure, determining the selection guidelines and the budgets and the refresh strategy.
- ▶ Acquire – identifying new asset needs and completing the purchase process, receiving, tagging and defining the IT asset and appropriately recording details in the IT Asset database.
- ▶ Deploy – make the asset live in the business context where it is needed and validate it meets the requirements of the business users.
- ▶ Manage – managing move & change requests, repairs and warranty management, ongoing audits and appropriate corrective action as required in case of any gaps.
- ▶ Retire – manage disposal, destruction of data and coordination of replacement assets.

With our strategic ITAM implementation approach we help our clients address significant business challenges like:

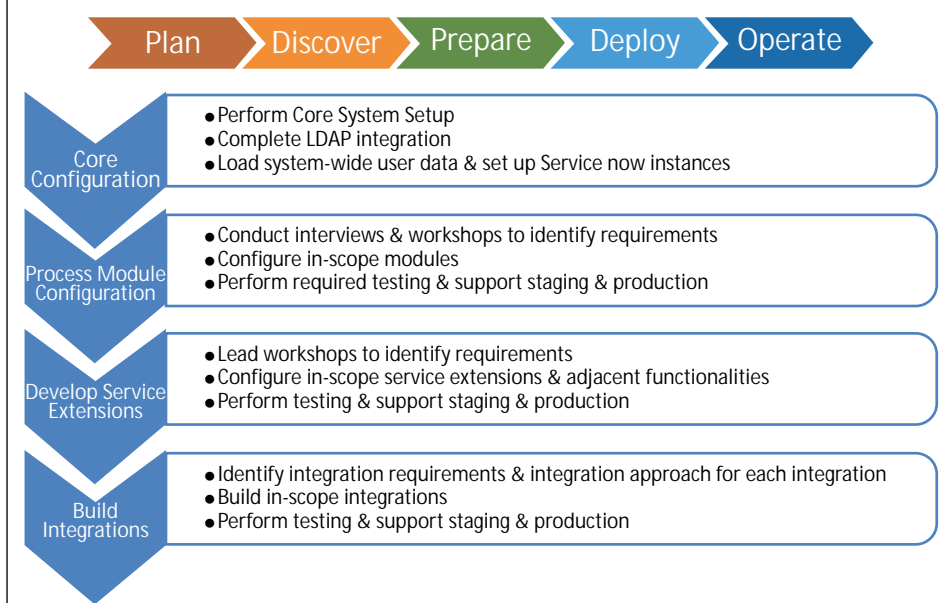
- ▶ Ensuring optimal usage of the IT assets, hardware and software, available to the business to ensure effective, timely and on-demand service delivery.
- ▶ At all times maintaining a consolidated view of the IT assets spread out across the geographically dispersed enterprise.
- ▶ Leverage technologies like the Cloud to provide service delivery to the business users instantly.
- ▶ Managing security and integrity of the IT assets across the enterprise even in the face of complex infrastructure, multiple locations and cloud deployments.

We achieve this by leveraging our integrated business process design and technology implementation capability. Our professionals are the top talents in the business with an intimate personal understanding of the business verticals we service. This allows us to deliver flexible solutions that work in the real world. Our strength lies in delivering solutions that are customized to the specific requirements of our customers including complex integrations with the other systems in the eco-system like Financial and Procurement Management systems.

For more information about our capabilities or about IT Asset Management please write to us at information@alcortech.com

Implementation Methodology

We follow a Scrum based methodology to implement & integrate.



CONCLUSION

Organizations are depending on their IT Infrastructure more than ever before and in parallel the IT Assets that make up the Infrastructure are becoming more complex and distributed. IT Departments face real challenges of lack of visibility, loss of control and more difficult compliance adherence and management. An inability to address these challenges has the potential to impact the business. In this environment implementing a comprehensive IT Asset Management strategy can help the IT Department address these challenges more effectively.

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Alcor is a technology implementation company focusing on Enterprise and Government technology needs in ITSM, systems integration, web development and mobility space. We provide a strategic ITSM implementation approach to our clients and focus on solving business problems by leveraging an integrated business process design and technology implementation capability.

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