The Business Value of Software Asset Management

Sponsored by: Microsoft

Robert Young   Utsav Arora
October 2016

EXECUTIVE SUMMARY

In today's increasingly dynamic IT environments, the ability to effectively access, manage, and secure both software and hardware assets is more critical than ever. Likewise, optimized asset management practices allow IT organizations to contrast the current and future costs of assets and, based on these projections, improve IT operations productivity and cybersecurity. In addition, by embracing a holistic asset management strategy, IT departments can more effectively assess their production and nonproduction datacenter designs and workloads, such as SQL, to uncover use cases that stand to benefit from virtualization and/or cloud-based architectures.

IDC believes that as a result, IT asset management offerings will increasingly grow in criticality as organizations continue to transition from traditional client/server models to virtualized and cloud-based architectures. In fact, IDC's research shows that the worldwide IT asset management software market reached $1.7 billion in 2015, representing an annual growth rate of 7.0%, and is forecast to grow to $2.6 billion in 2020, at a compound annual growth rate (CAGR) of 8.4% for the 2015-2020 period.

This Solution Brief analyzes the benefits that Microsoft's Software Asset Management (SAM) program is providing to organizations interviewed by IDC. To better understand the value of Microsoft's SAM program, IDC conducted interviews with four organizations that have gone through the SAM program. The nature of SAM programs undertaken by the surveyed organizations has been a baseline review of their Microsoft product deployment and licensing position and/or an assessment of the readiness of the customer for Microsoft's cloud-ready enablement program.

This Solution Brief analyzes the business and technical challenges that led to the organizations' investment in the SAM program and the subsequent benefits and results that the organizations are attaining through the program. The organizations represent a diverse array of geographies — Brazil, Thailand, Russia, and Germany. The four customers interviewed are of varying sizes and from a cross-section of industries:

- **Phyathai and Paolo Hospital Group.** Phyathai and Paolo Hospital Group is a healthcare provider based in Bangkok, Thailand. The organization consists of four Phyathai hospitals and four Paolo hospitals.
- **BIC Brazil.** Headquartered in Clichy, France, BIC is a global consumer packaged goods company and primarily supplies stationary. IDC interviewed BIC Brazil, BIC's Brazilian subsidiary and Latin American headquarters.

- **ABBYY.** As a global company that develops solutions for content capture and language-based technologies that integrate across the information life cycle, ABBYY has four headquarters: Moscow, Russia; Germany; Ukraine; and the United States.
- **A major German healthcare provider with hospitals across Germany.**

IDC's analysis revealed that the interviewed customers have attained a diverse spectrum of benefits from participating in the Microsoft SAM program. While they may vary by organization, the benefits attained include:

- Optimizing technology assets including software investments
- Minimizing risk and enabling compliance while achieving greater value from IT investments
- Reducing cost by avoiding duplicated software investments and unauthorized software
- Realizing productivity gains among business and/or IT staff
- Facilitating cloud adoption

SITUATION OVERVIEW

The influx of 3rd Platform technologies such as mobile devices, Internet of Things (IoT), robotics, cognitive and artificial intelligence, and cloud-based computing will increasingly add complexity and cost to the entire IT ecosystem if it is not controlled (see Figure 1). Therefore, today, it is more important than ever that organizations continuously evaluate how hardware and software assets are inventoried, managed, and secured. Without a holistic approach to asset management, which includes an understanding of how all forms of hardware and software assets are linked to business processes, IT will find it virtually impossible to optimize the dynamic resources essential for delivering critical business services. This IT management disconnect not only stands to accelerate security and investment risk but also raises operational costs and can diminish the value of technologies necessary to achieve desired business outcomes.

To that end, IT leaders are increasingly realizing that traditional/siloed approaches to asset management often lack the insights necessary to respond quickly to business needs, are not comprehensive, and don't scale sufficiently to keep pace with the performance and security demands of today's complex IT environments. As a result, many internal line-of-business executives are taking charge of their IT future by procuring their own resources, often without the involvement of internal IT. In fact, an IT organization's failure to move at the speed of the business often fosters rogue IT trends such as "shadow IT." Shadow IT is undoubtedly a growing trend. However, its long-term effects can be detrimental to both the business and the IT organization, often resulting in higher technology costs, increased security vulnerabilities, and less information continuity across the organization.

As a result, to remain effective and relevant, IT organizations must demonstrate their abilities in efficiently delivering business service while managing, securing, and controlling the costs of IT systems. In addition, IT will increasingly be expected to maintain proper governance and control over corporate data associated with applications and services running on an ever more disparate set of device types and datacenter architectures to include public cloud.

To that end, additional asset management and, in turn, cybersecurity challenges arise when isolated IT silos independently aim to embrace and optimize bring-your-own-device (BYOD), mobile, cloud, and virtual technologies. Individual teams and/or administrators with little or no visibility into cross-system dependencies often hinder effective system and application performance, data security, and IT operations productivity. What's more, this lack of visibility often directly impacts the business' growth imperatives.

FIGURE 1

3rd Platform Landscape

OVERVIEW OF MICROSOFT'S SOFTWARE ASSET MANAGEMENT PROGRAM

Microsoft's SAM program is a set of IT practices that integrates the people, processes, and technologies needed to holistically manage and optimize software asset usage and management across the varying device types being used in the workplace. Effective implementation of Microsoft's SAM program can help organizations control operational costs, manage cybersecurity risks, optimize software licensing investments, and better allocate IT systems and services to accommodate expanding business needs. What's more, discovering the organization's entire fleet of IT assets and mapping those assets to business purposes are critical first steps in establishing effective systems and security management programs as well as enabling successful cloud migration initiatives.

The assurance of an up-to-date inventory to properly assess the location, status, and usage of an organization's existing IT assets can be a significant enhancement to effectively managing cybersecurity as well as application performance and optimization. Microsoft has designed the program to address common use cases that include cloud migrations, cybersecurity, mobile device management, virtualization, SQL Server deployments, and nonproduction workloads. Three of these use cases are highlighted in the sections that follow.

SQL Server

SAM enables IT organizations with advanced capabilities for assessing their SQL Server environments, which in turn helps IT staff determine improved methods for optimizing and scaling the organizations' Microsoft SQL Server investments. Likewise, improved visibility also enables IT to

mitigate the presence of underutilized SQL Servers, ensure proper usage and licensing models, and establish SAM policies and procedures that allow IT to ensure the effectiveness and readiness of the organizations' SQL Servers.

What's more, companies are increasingly relying on the use of big data to drive competitive differentiation, thereby having clear visibility into the locations of data sources, like SQL Server, regardless of time and location to ensure that corporate data is both easily accessible and properly secured, which is becoming more and more critical to the business.

Cybersecurity

To effectively protect company data, organizations must be aware of potential cybersecurity risks and able to place threats into business service context, assessing how vulnerabilities could impact the firms' ability to conduct day-to-day operations. Likewise, cybersecurity threats can unknowingly expose an organization's intellectual property to a malicious attack as well as place customer, partner, and employee privacy data at risk. As a result, an effective SAM program should enable organizations to address the following key cybersecurity initiatives:

- Securely manage software assets and promote cybersecurity best practices
- Provide full visibility of assets across the IT environment to ensure secure IT infrastructure that provides an effective defense against attacks
- Mitigate the unnecessary risk of data loss and the cost to locate and reinstall lost or stolen data
- Protect the organization from data loss, employee downtime, and negative reputation resulting from data breaches

Cloud Migrations

While the continued trend of business-related applications and hardware being offered in a cloud-based consumption model is adding significant complexity to IT operations, the increase in employee productivity, collaboration, and satisfaction that the SaaS and other public cloud services offer is not lost on business leaders.

Business leaders are increasingly looking to IT to deliver cloud-based systems and services that allow employees to securely access corporate data, applications, and communication resources on their devices of choice. But making the most of the opportunity while minimizing risks and migrating for existing infrastructure can be complex and overwhelming for many IT teams. Therefore, IT leaders should consider SAM solutions that aid with the following:

- Helping determine whether on-premises, cloud, or hybrid is the best structure for the business
- Mitigating risks associated with moving datacenter assets for consolidation, cloud, and virtualization projects
- Delivering a long-term cloud migration road map that helps define migration goals
- Assessing whether migrating to the cloud will make it easier to manage software assets
- Having an in-depth understanding of software licensing for both cloud and on-premises deployments

To that end, as IT organizations plan for continued investments in datacenter consolidation, virtualization, and cloud computing, they must account for how these strategies and architectures will accelerate the need for more unified and service-centric approaches to IT asset management,

cybersecurity, and datacenter operations; otherwise, service levels will suffer while the cost of IT operations trends upward.

With an effective approach to IT asset management, organizations can be more responsive to increasingly dynamic business needs by ensuring that the datacenter infrastructure supporting digital services is optimized, secure, and in compliance with industry and regulatory mandates.

## THE BUSINESS VALUE OF MICROSOFT SAM

In today's technology-driven world, organizations are increasingly relying on enterprise software to facilitate growth, meet their business objectives, increase collaboration among employees, and improve overall productivity. In an effort to capitalize on technology offerings including Microsoft's vast suite of enterprise products, organizations often have a large and complex inventory of software assets within their technology environment. This may include multiple investments of identical software assets and licenses. Through interviews with Microsoft's customers, the organizations reported that the Microsoft SAM program enables them to optimize their software inventory, eliminate duplicate software investments, and improve the overall technology procurement process. The SAM program essentially helps organizations minimize risk while achieving greater value with their IT investments. Though the specific benefits attained may vary by organization, the SAM program has resulted in significant cost reductions, streamlined the software asset management process, facilitated compliance, empowered organizations to achieve significant productivity gains, and enabled cloud adoption. The benefits associated with the Microsoft SAM program are discussed in further detail in this Solution Brief.

Optimization of Technology Assets

Organizations with complex organizational structures or many subsidiaries may lack a centralized software procurement framework, and as a result, different departments or subsidiaries often purchase multiple instances of identical software. This adds complexity to the technology environment within organizations and can cause duplication in software investments. The Microsoft SAM program enables organizations to conduct a thorough review of their software assets and empowers them with a framework and best practices to define and implement centralized software procurement policies. In addition, Microsoft's partners help organizations identify software assets that are often unknown or unmanaged by the IT department. As a result, the surveyed organizations reported that the Microsoft SAM program has enabled them to optimize their inventory of software licenses. As Phyathai and Paolo Hospital Group noted, *"Microsoft SAM enabled us to review our inventory of Microsoft software, and we discovered that on many devices, several instances of the same software were installed."* As a healthcare provider managing several hospitals across Thailand, Phyathai and Paolo Hospital Group said that participating in the Microsoft SAM program helped it eliminate software licenses that weren't required as well as multiple instances of identical software. By reviewing its inventory of software licenses, Phyathai and Paolo Hospital Group was able to reduce a variety of IT-related costs (see Figure 2).

FIGURE 2

Reduction in Annual Costs as a Result of Software Asset Management
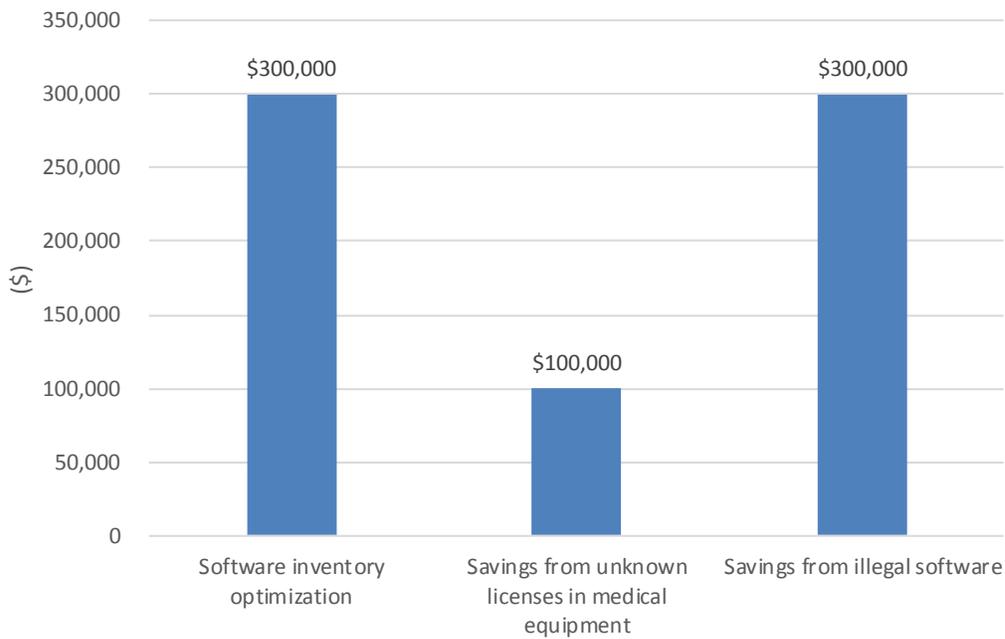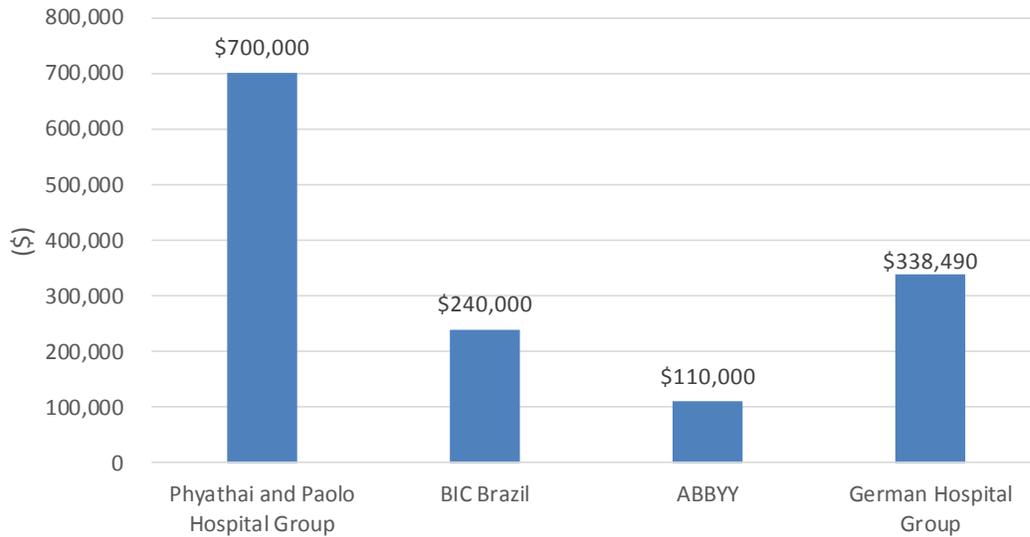

Source: IDC, 2016

Participating in the Microsoft SAM program enabled the Russian office of the global technology company ABBYY to *"gain a comprehensive view of Microsoft deployments and licenses within our organization and maximize our use."* ABBYY has three major entities in Russia and offices in Europe, the United States, and Ukraine, as well as other countries. Within one year of its Microsoft SAM program at Moscow headquarters, ABBYY has been able to reduce the redundancy of Microsoft assets, particularly SQL Server and Windows Server licenses. While the first phase of ABBYY's SAM program was limited to a software inventory review at the Moscow headquarters, in an effort to conduct a centralized software review, the company has plans to invest in SAM programs across its different entities and regional offices with the aim of *"conducting comprehensive IT inventory checks and working toward establishing a centralized IT department."*

Optimizing software assets has also enabled the surveyed organizations to optimize their IT infrastructure environments and reduce infrastructure-related costs. Eliminating excess software applications and licenses allowed ABBYY to reduce its infrastructure-related resources: *"ABBYY had a combined total of more than 350 virtual and physical servers. By reducing our inventory of software applications and licenses, we've been able to reduce the combined total of virtual and physical servers to 300. This has resulted in datacenter-related cost savings of $110,000, including power, equipment, networking, and hardware."* BIC Brazil echoed similar sentiments, as it was able to *"eliminate three virtual servers in the past year alone."* As a result of improving optimizing their inventory of software assets, the surveyed organizations have achieved significant cost reductions (see Figure 3).

FIGURE 3

Annual Cost Reductions as a Result of the Microsoft SAM Program

Source: IDC, 2016

MICROSOFT SAM CASE STUDY — ABBYY

ABBYY is a global software company and, as a Microsoft Gold Partner, it has a large inventory of different Microsoft licenses. Through the SAM program, ABBYY wanted to obtain a comprehensive view of its inventory of Microsoft licenses and capitalize on its investments in Microsoft's products and services.

During its SAM engagement, ABBYY analyzed more than 500 workstations and 350 physical and virtual servers. A specific focus was placed on the servers within the IT infrastructure environment because ABBYY's growing base of customers required an increase in processing speed of SQL Servers. As a result of reducing its inventory of software applications and licenses, ABBYY was able to free up server capacity and reduce labor costs for routine server-related maintenance. In addition, the SAM program led ABBYY to enhance its investments in cloud services such as Microsoft Office 365 and Microsoft Azure. Since participating in the SAM program, ABBYY has expanded its cloud-based infrastructure by investing in Azure services and is evaluating how the Office 365 product suite could help the organization achieve its goal of a centralized IT environment. It is evident that the SAM program has helped ABBYY optimize its software assets, reduce IT infrastructure costs, and facilitate its journey toward investing in cloud-based services.

Reducing Business Risk by Enabling Compliance and Enhancing IT Security

The Microsoft SAM program has enabled the surveyed organizations to establish policies and procedures that reduce business risk and support various compliance-related initiatives. Software inventory reviews conducted under the SAM framework have helped organizations reduce business risk by enabling compliance, eliminating unauthorized or illegal software, and detecting vulnerabilities related to the storage of sensitive data on hardware. For example, Phyathai and Paolo Hospital Group mentioned that *"through the first phase of our SAM program, the IT department discovered several instances of illegal copies of Microsoft software."* In addition, the organization discovered that some of its advanced medical equipment had built-in storage capabilities with raw servers where sensitive patient data was being stored. Phyathai and Paolo Hospital Group saw this as a security risk and rectified it by removing the unwanted technology installations. Through SAM, Phyathai and Paolo Hospital Group has been able to constantly evaluate its technology assets and identify risky installations that could create vulnerabilities, thereby offering patients complete confidence in the safety of their personal medical data. Realizing that today's healthcare equipment generates and processes data, Microsoft helps organizations manage this complexity with the SAM program. The SAM program has aided Phyathai and Paolo Hospital Group in assessing the hospitals' entire range of interconnected systems and address security-related issues through an organized IT management framework. Furthermore, Phyathai and Paolo Hospital Group has implemented several recommendations and best practices from its SAM program to areas beyond IT, such as procurement of medical equipment.

In addition to reduced business risk through enhanced security, the surveyed organizations have enhanced financial reporting by improving the process of reviewing software assets. For example, ABBYY credited its SAM program *"with enabling the IT department to accurately report the inventory of software licenses to financial auditors, thereby helping us to meet internal and external compliance requirements."*

The Microsoft SAM program has also helped organizations that have gone through a merger and acquisition (M&A) gain a holistic understanding of their software assets. Following an M&A, a hospital group in Germany was able to identify *"unwanted and outdated software"* with the help of the SAM program. As a result, the hospital group was able to identify and eliminate potential IT security risks from certain software applications.

IT Staff Productivity

As a result of optimizing technology assets and software inventory, the surveyed organizations reported productivity gains among IT staff. Prior to participating in Microsoft SAM programs, the surveyed organizations conducted their own reviews of software assets, which were often time consuming and required the attention of a large number of IT resources. For example, Phyathai and Paolo Hospital Group noted that its IT department previously spent 10 business days to review its inventory of software assets. By working with Microsoft's partners and implementing the recommendations of its initial Microsoft SAM program, Phyathai and Paolo Hospital Group is now able to review its inventory of software assets in 1 business day. This has empowered the organization's IT staff *"to focus on strategic initiatives such as undertaking various technology initiatives that are focused on increasing efficiency among our different hospitals and working with medical practitioners to evaluate how technology can improve patient care."* As a result of participating in a Microsoft SAM program, BIC Brazil noted a *"20% reduction in the time spent by IT staff to review its inventory of software assets."* In addition, the review of software assets enabled BIC Brazil's IT department to

evaluate the organization's existing software inventory and identify possible areas of nonalignment within the technology environment and the organization's overall business objectives.

By optimizing software investments, the surveyed organizations were also able to reduce the overall complexity of their technology environments. As a result, the IT departments within the surveyed organizations reduced the time spent on software maintenance. For example, a major healthcare provider in Germany articulated that SAM has helped its IT department *"accelerate the time required to complete day-to-day IT maintenance tasks such as change and configuration management and reduced the number of incoming calls to help desk operations."* As a result, the Germany-based hospital group has reallocated the time of two full-time IT staff members toward areas of greater strategic value.

OPPORTUNITIES/CHALLENGES

Consumerization of IT is creating ever more demanding end users, increasing security issues, and reducing the IT department's ability to maintain the necessary governance framework to ensure compliance with corporate policy. Likewise, organizational leaders are quickly discovering the need for asset management solutions that can seamlessly scale with the rapid proliferation of hardware and software platforms in the enterprise to ensure all hardware and software assets are properly optimized and secured.

Today, IT has to be concerned with the impact that 3rd Platform technologies have on not only core infrastructure (servers, networking, etc.) but also the end-user computing environment. For instance, IT organizations are increasingly expected to support disparate device types and operating systems as well as varying software platforms to include legacy on-premises, SaaS, native mobile, and graphic-intensive applications. Therefore, to ensure the optimization and security of the systems and services underpinning essential business processes as well as effectively embrace cloud initiatives, IT organizations must expand their asset management practices far beyond static inventory spreadsheets and manual processes.

When IT organizations lack the ability to holistically manage and assess their company's assets to rationalize the IT environment, they often overprocure and/or underprocure IT assets. Inadequate IT purchasing and asset management practices (underprocurement) can have detrimental implications on the organization's bottom line and can greatly reduce IT staff business productivity and continuity. In addition, underprocurement can result in unnecessary business user downtime, increased risk of noncompliance, and growth in shadow IT trends. The overpurchasing of IT resources (overprocurement) often results in unnecessary spending on licensing renewals and maintenance contracts, siloed knowledge across the organization, shelfware, and an increased risk of cybersecurity vulnerabilities.

Likewise, often the first step in establishing an effective IT asset/security management program is to conduct an all-inclusive asset discovery and inventory scan because it is essential to identify all the assets within the organization as well as their current status to effectively manage and secure corporate IT resources. Effective risk management best practices dictate that IT security plans not only leverage clear, accurate, and near-real-time visibility into all assets but also encompass the management and ongoing maintenance of those assets. By leveraging a comprehensive asset management solution that offers visibility into all the devices and applications in the organization, IT administrators can mitigate unnecessary security risks as well as financial and operational costs.

IDC recommends that comprehensive asset management initiatives focus on several key IT disciplines, such as IT cybersecurity, enterprise architecture, portfolio management, change and configuration management, and IT financial management.

CONCLUSION

In totality, the surveyed organizations view the SAM program as the first step of an ongoing and dynamic process, continuously enabling them to monitor and manage their respective inventories of software assets. The organizations that IDC interviewed expressed a strong commitment to participating in SAM programs on a recurring basis and expand the scope of existing programs to different geographies and subsidiaries. In addition, the organizations articulated how the Microsoft SAM program has empowered them with a concrete framework and set of best practices that they can apply to their software procurement and inventory review process. The Microsoft SAM program has also helped certain organizations with their cloud transformation strategy.

The assurance of up-to-date asset inventory to properly assess enterprise software and correlate its usage with business processes can serve as a significant enhancement to effectively managing data sovereignty/security as well as application performance and prioritization. In addition, IT can also more effectively compare the current and future costs of an asset and, based on these projections, influence both current and future datacenter architecture designs.

IDC believes that to ensure the optimization and security of the devices and software underpinning essential business processes as well as effectively empower an increasingly mobile and global workforce, IT organizations must expand their software asset management practices far beyond static inventory spreadsheets and manual processes. Likewise, with an increasing number of device types – both corporate and personally owned – penetrating the corporate domain, IT must be able to efficiently inventory, assess, manage, and secure all the devices and software associated with a user.

In addition, modern technology trends (e.g., virtualization, mobile, and cloud) are increasing the complexity and importance of software license compliance as licensing models are becoming ever more convoluted as they evolve and vary based on usage from traditional client/server instances to virtual and cloud-based infrastructures. As a result, IT organizations lacking the ability to properly visualize and assess their company's assets to rationalize the IT environment often overprocure or underprocure hardware and software requirements. Effectively determining actual enterprise application use in the organization enables the company to make informed decisions about licensing agreements and be well prepared for vendor renegotiations.

Disparate hardware platforms, operating systems, and applications in the enterprise increase not only the complexity of IT operations and software licensing models but also the risk of security attacks. Cyberattacks often take advantage of the high vulnerability of end-of-life (EOL) IT systems and/or software that have ceased to receive product updates and security patches from vendor sources. Understanding risk impact is challenging when there is limited or no understanding of where the assets reside and precisely how the assets support the business. To that end, SAM initiatives enable organizations to quickly discover how many devices and applications are in the environment, along with their location and their warranty status, which can significantly reduce unnecessary cost, waste, and cybersecurity risks. Establishing a comprehensive asset management program provides a common source of record, which enables IT to carry out more timely security patches and identify security threats sooner as well as better respond to software audits. Therefore, asset management

should be viewed holistically as an essential component of an effective IT infrastructure, service, and cybersecurity management program.

As IT organizations plan for continued investments in 3rd Platform computing, they must account for how these strategies and architectures will accelerate the need for more unified asset monitoring, analytics, and service-centric approaches to device and application management. Without adequate asset management resources and processes, service levels will suffer while the cost of IT operations trends upward. IDC believes that organizations will increasingly look toward mature SAM practices in order to reduce cybersecurity, financial, reputation, and compliance risks.

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

Global Headquarters

5 Speen Street
Framingham, MA 01701
USA
508.872.8200
Twitter: @IDC
idc-community.com
www.idc.com