



Sponsored by: **BMC**

Authors:
Shannon Kalvar
Matthew Marden

November 2018

Business Value Highlights

470%

Average ROI over five years

8 months

Payback period

\$127,679
per 100 servers

Average business benefits over five years

14%

more efficient asset management

76%

lower total cost of failed software audits

\$7,202
per year per 100 servers

Infrastructure cost savings

The Business Value of BMC Helix Discovery Software

EXECUTIVE SUMMARY

Increasingly complex and heterogeneous IT ecosystems require organizations to broker, integrate, and orchestrate the delivery of 3rd Platform IT systems. These services are made up of cloud, mobile, big data, and social technologies that are mission critical to business operations or involve privacy issues for protected information.

IDC expects that the continuing emergence of AI and IoT will continue to add complexity to the entire IT ecosystem and, in turn, affect how IT is provisioned, monitored, managed, and secured. Without a holistic approach to asset management that includes an understanding of how assets are linked to business, IT will find it virtually impossible to prioritize and optimize the dynamic infrastructure and applications essential for critical IT business services. This IT management disconnect not only accelerates security and investment risk but also raises costs and diminishes the value of technology necessary to achieve desired business outcomes.

To ensure the optimization and security of the systems and services underpinning essential business processes as well as effectively embrace DevOps, big data analytics, and hybrid cloud initiatives, IT organizations must expand their infrastructure management practices far beyond static inventory spreadsheets and manual processes.

In addition, with the widespread use of management frameworks such as ITIL and IT service management combined with the enterprise's increasing push toward digital transformation, IT executives need as much visibility as possible into the hardware and software that support mission-critical business services and processes.

In this study, IDC interviewed nine organizations using BMC Helix Discovery¹ software to understand how they are using the software to achieve improved visibility into their datacenter operations. IDC's research shows that these organizations are realizing strong value with Helix

¹Helix Discovery is also known as BMC Atrium Discovery and Dependency Mapping (BMC ADDM).

Discovery by capturing benefits from staff efficiencies, reducing vulnerabilities, enabling more effective auditing operations, and reducing costs. As a result, IDC projects that these Helix Discovery customers will earn an average five-year return on investment (ROI) of 470% by:

- Benefiting from IT staff time savings and efficiencies enabled by visibility, improved understanding of datacenter assets and dependencies, automation, and faster resolution of problems
- Making software and other auditing efforts more efficient and cost effective and reducing the costs of failed software audits
- Improving datacenter security
- Reducing datacenter costs by identifying underused and unused hardware and software and enabling informed decisions about optimizing datacenter costs

SITUATION OVERVIEW

The consumerization of IT and shifting work patterns have changed the needs of end users, driving up expectations on advanced functionality, speed, and transparency, and lower cost. To meet these needs a proliferation of technologies are emerging in the work environment including: artificial intelligence/machine learning, cloud provisioning, specific use “Internet of Things” devices, software services, and AR / robotics integration. These diverse and dispersed technology additions to traditional IT systems are often purchased outside of traditional IT or procurement channels, through “as a service” style arrangements. These technology assets and their accompanying flood of data have increased the enterprise threat surface while simultaneously reducing IT’s ability to govern users to ensure compliance with corporate policy.

Additionally, there is a budgetary shift which will leave central IT as the minority partner in information technology spend (<48% of total IT spend) across all industries by 2022. This budget trend is likely to accelerate, driven by the expansion of “as-a-service” contracts into areas beyond general compute (cloud), mobile devices, and software to include AI, Data Analytics, and Facilities.

The trend towards adoption of these technologies, which IDC calls the “3rd Platform”, bring opportunities as well as threats. Ad hoc corporate groups can theoretically build solutions to meet quickly emerging business needs and dispose of them when the need has passed. The IT asset pool can contain a large set of ephemeral devices which are fit-for-use and fit-

for-purpose, managed and retired by organizations focusing on that activity, allowing IT to focus on only the assets that matter most. Computing assets can be drawn, integrated, used, and retired as needed across multiple sources (i.e. multi-cloud) saving money and providing superior service.

To leverage these opportunities, IT organizations are wrestling with the need for asset management service solutions that seamlessly scales with the increasing complexity related to these new asset classes. Even something as seemingly innocuous as a fish-tank thermometer added to the enterprise IOT fabric, has the potential to become an exposed threat surface leading to the compromise of sensitive corporate data or unauthorized entry into the company's entire network.

This rapidly expanding system complexity, coupled with the ambiguous ownership of "assets" in "as a Service" arrangements where different divisions within the enterprise may maintain different contracts, commitments, and even operating models, also increases administrative complexity. IT administrators are challenged to meet SLAs and remediate issues quickly when they depend on manual processes and/or disaggregated systems management tools for asset provisioning, configuring, securing, and accounting.

Discovering the organization's IT assets and mapping these assets to business purposes is a critical first step in establishing an effective systems and security management program. The assurance of up-to-date asset inventory and dependency mapping to properly assess the threat surface can be a significant enhancement to effectively managing cybersecurity as well as application performance and prioritization. IT can also compare the current and future costs of an asset and, based on these projections, affect datacenter architecture designs.

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

HELIX DISCOVERY

IT leaders are realizing that traditional approaches to IT service and operations management don't provide the tools necessary to respond quickly, are not comprehensive, and don't scale sufficiently to keep pace with the demands of today's complex IT environments. As a result, many line-of-business executives are taking charge of their IT future by procuring their own resources, often without the involvement of internal IT. To remain relevant, IT organizations must demonstrate their abilities in efficiently and effectively delivering, managing, securing, and brokering dynamic IT systems and services.

Additional challenges arise when isolated enterprise silos independently aim to embrace 3rd Platform technologies. Individual teams and/or administrators have limited multi-cloud, SaaS subscriptions, and cross-system dependencies, hindering effective root cause analysis and IT operational performance. This limited visibility directly impacts business productivity and negatively impacts the employee experience.

Helix Discovery is BMC's cloud-native discovery and dependency mapping offering which provides visibility into hardware, software, and service dependencies across environments.

Having access to the rich discovery and relationship data enables organizations to be aware, secure, and transparent. This allows organizations to make better decisions, prioritize and remediate vulnerabilities, and understand how IT costs impact the LOBs.

Key Helix Discovery capabilities include the following:

- Discovery-as-code allowing for rapid integration with other management systems
- Enables rapid discovery, relationship modeling, correlation, visualization, and root cause analysis across geographically dispersed datacenter resources that can include more than 100,000 servers (In minutes, IT can link infrastructure and software to how they impact the business so that enterprises can optimize capacity, ensure stronger security, meet compliance requirements, and improve service, change, and problem management. Integration with a wide range of third-party systems and management tools provides operators with a unified view of system/service performance.)
- Reduces cost and time to prepare for audits, preventing audit penalties and enabling compliant and secure datacenter operations
- Self-customizes the portal and reports for specific roles and needs across network operations center (NOC) specialists and subject matter experts
- Minimizes change risks by empowering the change advisory board (CAB) with trusted dependency data to evaluate change impact
- Allows IT to mitigate risks associated with moving datacenter assets for consolidation, cloud, and virtualization projects

Through a comprehensive study with Helix Discovery customers, IDC documented the benefits of adopting holistic infrastructure management processes and how they can significantly improve the productivity of IT operations and service management teams. With Helix Discovery, these IT organizations showed they can prioritize incidents based on business impact and restore services faster with up-to-date configuration and relationship data, allowing IT executives to better position themselves as strategic business partners.

THE BUSINESS VALUE OF HELIX DISCOVERY

Study Demographics

IDC interviewed nine organizations using Helix Discovery software. The Helix Discovery customers are large organizations, with an average of 69,000 employees; 4,000 IT staff members; and 12,700 servers within their Helix Discovery environments. As such, they have expansive business and IT operations that include multiple geographical locations and datacenters. The interviews were designed to elicit both qualitative and quantitative information about how these organizations are using Helix Discovery and to understand the benefits and costs associated with their use of the software (see Table 1).

Most of the interviewed customers are using Helix Discovery to support two or more of their core use cases: asset management, service management, and infrastructure and operations management. A number of IT managers who were interviewed noted that they are extending their use of Helix Discovery as they see benefits from their current use cases. An IT manager at a United States-based healthcare organization explained his organization's approach as follows: "Initially we were focused on using Helix Discovery for a very narrow swath of application platforms. As we became more confident and the process for asset management as part of a broader IT service management strategy became more well accepted by IT leadership, then the application of Helix Discovery became broader, and we've moved from a fairly narrow scope to a broad scope of trying to discover everything."

TABLE 1 Demographics of Interviewed Organizations

	Average	Range
Number of employees	69,000	1,400–250,000
Number of IT staff	4,000	67–10,000
Number of IT users	62,500	1,000–250,000
Number of business applications	1,100	19–4,000
Number of servers in the organization's Helix Discovery environment	12,700	2,500–40,000
Number of business applications in the organization's Helix Discovery environment	968	270–1,700
Countries	United States, New Zealand, Australia, France, and United Kingdom	
Industries	Financial services, healthcare, government, communications and media, technology service provider, and automotive	

Source: IDC, 2016

Business Value Analysis

Interviewed organizations described challenges that led to their decision to use Helix Discovery. Specifically, they struggled to inventory and understand their extensive datacenter operations, including their hardware and software assets. As a result, they bore the costs of IT staff inefficiencies, time-consuming and costly software and other audits, and underused and unused datacenter assets. As an EMEA-based financial services organization explained, “Basically, we didn’t have an accurate inventory of our datacenter operations, and we had issues around software licensing. So we got Helix Discovery to help us figure that out.”

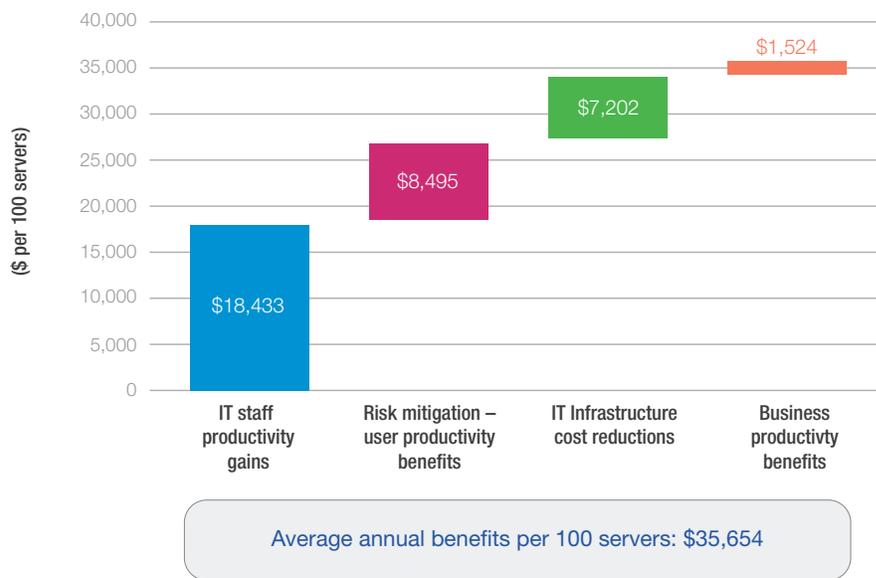
IDC’s interviews with Helix Discovery customers show that they are achieving significant business value by making their datacenter operations more efficient and effective. With Helix Discovery in place, these organizations have gained needed visibility into IT operations, have an increased understanding of their IT environments, and can match IT services to business demand.

As a result, IDC projects that these organizations will achieve average annual benefits worth \$35,654 per 100 servers in their BMC environments over five years (\$4.5 million per organization) in the following areas (see Figure 1):

- **IT staff productivity gains:** Helix Discovery improves IT staff time savings and efficiencies through clarity in terms of inventory and configuration, automation, and improved ability to troubleshoot problems. As a result, IT teams responsible for incident, change, release, asset, and configuration management are more efficient and can serve their lines of business better. This also includes teams responsible for maintaining and managing server, network, and storage environments. IDC projects that these organizations will realize average annual benefits worth \$18,433 per 100 servers over five years (\$2.33 million per organization) from IT staff efficiencies.
- **Risk mitigation — user productivity benefits:** Helix Discovery makes software and other auditing efforts more efficient and effective. As a result, organizations devote less staff time to preparing for and carrying out audits and minimize costs associated with failing software audits. IDC puts the average annual value of the time savings and cost reductions associated with audits at \$8,495 per 100 servers over five years (\$1.08 million per organization).
- **IT infrastructure cost reductions:** Helix Discovery provides the visibility needed for organizations to identify underused and unused hardware and software in their datacenters and retire or reallocate these assets as appropriate. IDC calculates that these organizations will achieve an average annual cost savings of \$7,202 per 100 servers over five years (\$911,000 per organization) from IT infrastructure optimization.

- Business productivity benefits:** Helix Discovery improves the ability of IT teams to support business needs through agility by enabling better understanding of application and datacenter environments. This translates to higher productivity for certain groups of employees through improved application performance and scalability, to which IDC attributes an average annual value of \$1,524 per 100 servers over five years (\$193,000 per organization).

FIGURE 1 Average Annual Benefits



Source: IDC, 2016

IT Staff Productivity Gains

Helix Discovery customers reported that they are achieving significant IT staff efficiencies in both service management and datacenter management operations. They attributed these efficiencies to common benefits of using Helix Discovery, such as improved visibility, understanding configurations and dependencies, automation, and reduced time to resolve problems.

IT Service Management Operations

Interviewed organizations maintain sizable teams dedicated to supporting IT operations with service management in areas such as incident, change, release, asset, and configuration management. The numerous resources devoted to these responsibilities reflect their criticality in maintaining efficient and effective IT operations. IT managers interviewed for this study reported that these teams have become more efficient since the deployment of Helix Discovery, with efficiencies of 19% for configuration management, 14% for asset management,

11% for change management, and 8% for incident management (see Table 2). These efficiencies enable these teams to better support operations without commensurate increases in staffing size and position them to spend more time ensuring that IT services support evolving business operations and demand.

Interviewed organizations mentioned several ways in which they are achieving IT staff efficiencies with Helix Discovery:

- Integration with configuration management databases.** About half of interviewed organizations have done some work to integrate Helix Discovery with their configuration management databases. This integration enables efficiencies through automation and improved ability to monitor datacenter environments in real time. As one United States-based service provider explained, “Our CMDB is used for incident, change, configuration, and asset management. The benefit of Helix Discovery is that it automates maintenance and support, which means less work for staff, and they’re probably 50% more productive in each of these areas.”
- Better data and visibility.** Improved data means more effective operations, including incident management where it helps ensure faster and more accurate responses. As one organization commented, “With Helix Discovery, the incident management team can tell all of the relationships and impact when they get an incident. So they can do an impact analysis on a specific server to see what else is impacted, which helps tremendously in knowing what could potentially be impacted.”
- Fewer mistakes.** Because organizations have a better understanding of their datacenter assets with Helix Discovery, members of their asset and configuration management teams are less likely to make mistakes. This means they spend less time identifying and remedying mistakes, improving their productivity and efficiency.

TABLE 2 IT Service Management Staff Efficiencies

Staffing Category	FTEs Before Helix Discovery	FTEs with Helix Discovery	FTE Difference	Efficiency with Helix Discovery (%)
Incident management	91.4	84.1	7.3	8
Change management	52.8	47.2	5.6	11
Release management	18.9	18.7	0.2	1
Configuration management	7.5	6.0	1.5	20
Asset management	42.2	36.4	5.8	14

Source: IDC, 2016

IT Datacenter Management

Interviewed organizations leveraged Helix Discovery to make IT staff teams more efficient and productive. These teams handled the operations of core datacenter infrastructure, including servers, networks, and storage. As a result, organizations are able to spend less time “keeping the lights on” in these areas and more time supporting IT innovation and responding to business demand. Storage was noted by a number of respondents as an area where these organizations are looking to extend Helix Discovery’s coverage to capture efficiencies in maintaining and managing their storage environments (see Table 3).

Interviewed IT managers provided a number of examples of how they achieved efficiencies for their datacenter management teams with Helix Discovery:

- **An “authoritative source” for data.** Datacenter management teams benefit from having what one customer called “an authoritative source” for data about inventory and not needing to spend time manually updating inventory with BMC ADDM in place.
- **Proactive identification of problems.** Another organization attributed the value of Helix Discovery to being able to more proactively identify where problems might occur and being able to handle them before they consume time and resources. As one organization commented, “With Helix Discovery, information for vulnerability assessments is readily available so we can spend more time putting in remediation for vulnerabilities than going and finding them.”
- **Visibility into patching.** Another organization noted that it has made its patching operations more efficient and effective, thanks to visibility enabled by Helix Discovery, which saves IT staff time and improves its security posture. As one organization explained, “With Helix Discovery, we can scan the servers, and the application highlights which need patches through a visual display. We don’t have to rely on individual support teams but get the information in a report. It’s a tenfold improvement in patching.”

TABLE 3 IT Datacenter Management Staff Efficiencies

Staffing Category	FTEs Before Helix Discovery	FTEs with Helix Discovery	FTE Difference	Efficiency with Helix Discovery (%)
Server team	72.8	68.1	4.7	6
Network/storage teams	5.1	5.0	0.1	2

Source: IDC, 2016

Risk Mitigation — User Productivity Benefits

Interviewed organizations reported that Helix Discovery has helped them make their auditing efforts more efficient and cost effective. By serving as a trusted source for audit-related data, and making it easier to obtain necessary information, Helix Discovery enabled these organizations to expend less staff time on auditing and have reduced the likelihood of incurring fines and penalties. Further, they credited Helix Discovery with helping them improve overall IT security.

Software Audits

Given the breadth of their IT operations, interviewed organizations have historically found responding to software audits resource consuming and time consuming. As shown in Table 4, Helix Discovery has positively impacted this burden, enabling IT to better respond to software audits, spend less staff time on software audits, and pass a higher percentage of software audits. Nearly every interviewed Helix Discovery customer mentioned software audits as an area of benefit with Helix Discovery, and several highlighted it as an impetus for deploying the software.

For these organizations, the benefits of Helix Discovery flow from having improved visibility into software use and being able to easily access information needed to demonstrate the use and status of software licenses.

Moreover, several interviewed organizations mentioned BMC's "trusted party" status. As one organization noted, "Helix Discovery has saved us time on software audits because our vendors and suppliers trust it. They don't come with their own tools to rediscover everything. Now we just provide content from Helix Discovery. Before, a software audit could last almost a full year. We're doing one now with Helix Discovery that we expect will take one month." An IT manager at another organization remarked as follows: "When I first started doing asset management, it took almost 14 months for us to do a SQL Server audit. At the beginning of this year, we did a SQL Server audit with Helix Discovery in about 30 minutes!"

TABLE 4 Software Auditing Impact

	Before Helix Discovery	With Helix Discovery	Difference	Benefit with Helix Discovery (%)
Staff impact				
Number of software audits per year	1.8	5.1	3.3	183
Staff time per software audit (hours)	3,000	600	2,400	80
Total FTEs — software audits per year	2.8	1.6	1.2	43
Software audit failure impact				
Percentage of failed software audits	50%	17%	—	—
Number of failed software audits per year	0.89	0.85	0.04	4
Average cost per failed software audit	\$889,000	\$222,000	\$667,000	75
Total FTEs — software audits per year	\$791,000	\$190,000	\$601,000	76

Source: IDC, 2016

Other Audit Operations

Helix Discovery has made auditing operations an average of 42% more efficient. These efficiencies result from visibility, ease of obtaining data, and the ability to provide data as needed. The benefits are especially noticeable for organizations that face industry-specific auditing or compliance requirements. For example, one financial services organization reported that it has used Helix Discovery to support its Payment Card Industry (PCI) Data Security Standard compliance efforts: “We used to have to work with all the various teams about whether they are compliant or not. Now, through Helix Discovery, we can do it with a click of a button to see, and we cut down on consulting costs of people having to do this.”

Improved Overall IT Security

In addition to staff efficiencies and cost savings related to auditing, interviewed organizations credited Helix Discovery with helping them improve the overall security of their IT operations. In particular, they noted the importance of having a common source of record, carrying out more timely security patches, and being able to identify security threats sooner and more accurately. According to one interviewed organization, “We are constantly being brought in with Helix Discovery on different security and audit functions. We’re doing patch management with it and are identifying security patches that are not in place on servers that would ultimately put us at risk. We can then work with our security team to ensure that those are completed.”

IT Infrastructure Cost Reductions

Helix Discovery customers have leveraged improved visibility into and understanding of their datacenter environments to make their IT operations more cost effective (see Figure 2). In particular, they can scope with more certainty their hardware and software environments and make informed decisions about retiring or reallocating server and software resources. As a result, these organizations have been able to make informed decisions about optimizing their hardware and software environments, enabling substantial cost savings. As one organization explained, “We’re avoiding millions of dollars of software costs with Helix Discovery. We find where software is not being used or not required. Then we can reuse or reallocate the license instead of buying new licenses.” Another customer noted that it has benefited from optimizing datacenter asset use by business application: “The next wave of benefits for us with Helix Discovery came from being able to identify the product mix from a hardware and application perspective.”

FIGURE 2 Average Annual IT Infrastructure Cost Savings



ROI Analysis

IDC interviewed nine organizations using Helix Discovery software and recorded their results to inform this study’s analysis. IDC used the following three-step method for conducting its ROI analysis:

- **Gathered quantitative benefit information during the interviews using a before-and-after assessment.** In this study, the benefits included staff time savings and productivity gains, user productivity increases, increased revenue, and device-related cost reductions.
- **Created a complete investment (five-year total cost analysis) profile based on the interviews.** Investments go beyond the annual costs of using Helix Discovery and can include additional costs related to the solution, such as migrations, planning, consulting, configuration or maintenance, and staff or user training.
- **Calculated the ROI and payback period.** IDC conducted a depreciated cash flow analysis of the benefits and investments for the organizations' use of Helix Discovery over a five-year period. ROI is the ratio of the net present value (NPV) and the discounted investment. The payback period is the point at which cumulative benefits equal the initial investment.

Table 5 presents IDC's analysis of the average discounted benefits, discounted investment, and return on investment for the Helix Discovery customers interviewed for this study. IDC calculates that these organizations will invest a discounted annual average of \$22,418 per 100 servers (\$2.84 million per organization) over five years in Helix Discovery software, maintenance, IT staff time for deployment and management, and consulting and training. IDC projects that in return, these organizations can expect to achieve discounted benefits worth an annual average of \$122,679 per 100 servers (\$16.26 million per organization) over five years. This results in an average ROI of 470% over five years, with breakeven in their investment occurring in an average of about eight months.

TABLE 5 Five-Year ROI Analysis

	Average per Organization	Average per 100 Servers
Benefit (discounted)	\$16.26 million	\$127,679
Investment (discounted)	\$2.84 million	\$22,418
Net present value (NPV)	\$13.32 million	\$105,261
Return on investment (ROI)	470%	470%
Payback period	8 months	8 months
Discount rate	12%	12%

Source: IDC, 2016

CHALLENGES AND OPPORTUNITIES

Because IT operations costs are usually associated with overhead costs and chargeback/showback models are relatively imprecise, it is not always easy to demonstrate the value of IT management until hard metrics are available to identify existing hardware and software costs. While BMC seeks to address this issue with its innovative Helix Discovery product, the challenge of cost visibility will remain until such solutions gain widespread adoption.

BMC has undergone the first, and most critical, step in helping its customers along the digital transformation journey; it has started down the cultural and process changes required to transform itself while it updates, expands, and integrates its solutions to accommodate increasingly complex network, system, and application requirements and dependencies. Customers that want to get the most benefit out of their investment in Helix Discovery should request customer success assistance to tackle cultural, process, and workflow integration activities on a coordinated basis while they deploy both the asset management and IT operations management solutions.

IT executives must be made aware that a solution exists for the ever-expanding challenges associated with the rapid adoption of virtual, cloud, and mobile computing technologies in the workplace. The solution can be presented as a business case which involves two, mutually supportive cases: the savings associated with asset management and the ability to embrace digital transformation initiatives targeted at driving business imperatives including organic growth and merges-and-acquisitions.

BMC must continue to clearly articulate the enhanced benefits IT organizations can gain by leveraging a holistic approach to service and system management versus the usage of multiple disjointed point products. For instance, by leveraging a comprehensive solution, IT can view the diverse and dispersed IT system in a business service context and in turn ensure a wide range of software and hardware platforms remain optimized, secure, and compliant.

While cybersecurity stands to be a key driver and the budget-enabling catalyst for funding IT management solutions, the enterprise will subsequently target other outcomes and benefits dealing with financial IT management, hardware and software life-cycle management, portfolio management, and configuration management — thereby enhancing the whole IT infrastructure management value proposition.

SUMMARY AND CONCLUSION

IT organizations understand that creating actionable situational awareness in the diverse and dispersed IT system requires detailed knowledge not only of the owned and “as-a-service” assets, but also of their contract status, connections, interactions, purpose, and use. This awareness must also incorporate the events and other signals created by these assets, wherever and whenever the assets might be active.

Therefore, IT asset management should be viewed holistically as an essential component of an effective IT system, service, and security management program. For example, as modern technology trends (e.g., virtualization, mobile, and cloud) increase 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.

The dispersion of information technology budgets across the enterprise will, inevitably, lead to inconsistent acquisition of goods, services, and systems. This introduces additional complexity into the traditional under/over procurement problem addressed by both hardware and software asset management software. Inadequate enterprise purchasing and asset management practices stand to have detrimental implications on the organization’s bottom line and can greatly reduce IT staff business productivity and continuity.

Likewise, often the first step in establishing any large scale change, whether it be digital transformation or cloud computing, is to conduct an all-inclusive asset discovery and inventory scan, as it is essential to identify all the assets within the organization as well as their status to effectively manage and secure corporate IT resources.

Additionally, effective risk management best practices dictate that IT security plans not only leverage clear, accurate, and near-real-time visibility into assets but also encompass the management and ongoing maintenance of those assets. By leveraging a comprehensive systems management solution that offers visibility into all the systems and applications in the organization, IT administrators can reduce the unnecessary security risks as well as financial and operational costs associated with the overpurchasing/underpurchasing of IT systems and applications.

As IT organizations plan for continued investments in virtualization, mobile, big data, and multi-/hybrid- cloud computing, they must account for how these strategies and architectures will accelerate the need for more unified infrastructure monitoring, analytics, and service-centric approaches to IT management and datacenter operations. Without adequate, integrated

datacenter asset management resources and processes, service levels will suffer while the cost of IT operations trend upward. With Helix Discovery, IT organizations can be more responsive to business needs by ensuring the datacenter infrastructure supporting digital services is optimized, secure, and in compliance with industry and regulatory mandates.

APPENDIX

IDC's standard ROI methodology was utilized for this project. This methodology is based on gathering data from current users of Helix Discovery as the foundation for the model. Based on these interviews, IDC performs a three-step process to calculate the ROI and payback period:

- Measure the savings from reduced IT costs (staff, hardware, software, maintenance, and IT support), increased user productivity, and improved revenue over the term of the deployment.
- Ascertain the investment made in deploying the solution and the associated migration, training, and support costs.
- Project the costs and savings over a five-year period and calculate the ROI and payback for the deployed solution.

IDC bases the payback period and ROI calculations on a number of assumptions, which are summarized as follows:

- Time values are multiplied by burdened salary (salary + 28% for benefits and overhead) to quantify efficiency and manager productivity savings.
- Downtime values are a product of the number of hours of downtime multiplied by the number of users affected.
- The impact of unplanned downtime is quantified in terms of impaired end-user productivity and lost revenue.
- Lost productivity is a product of downtime multiplied by burdened salary.
- Lost revenue is a product of downtime multiplied by the average revenue generated per hour.

- The net present value of the five-year savings is calculated by subtracting the amount that would have been realized by investing the original sum in an instrument yielding a 12% return to allow for the missed opportunity cost. This accounts for both the assumed cost of money and the assumed rate of return.

Because every hour of downtime does not equate to a lost hour of productivity or revenue generation, IDC attributes only a fraction of the result to savings. As part of our assessment, we asked each company what fraction of downtime hours to use in calculating productivity savings and the reduction in lost revenue. IDC then taxes the revenue at that rate.

Further, because IT solutions require a deployment period, the full benefits of the solution are not available during deployment. To capture this reality, IDC prorates the benefits on a monthly basis and then subtracts the deployment time from the first-year savings.

Note: All numbers in this document may not be exact due to rounding.

IDC Global Headquarters

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

Copyright Notice

External Publication of IDC Information and Data — Any IDC information that is to be used in advertising, press releases, or promotional materials requires prior written approval from the appropriate IDC Vice President or Country Manager. A draft of the proposed document should accompany any such request. IDC reserves the right to deny approval of external usage for any reason.

Copyright 2018 IDC.

Reproduction without written permission is completely forbidden.

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.